

#### **BECEINED**

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March 27, 2019

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Norristown, PA 19401 2 East Main Street Southeast Regional Office Department of Environmental Protection Regional Air Quality Program Manager James Rebarchak

Title V Annual Compliance Certification Re:

TVOP 23-00012; Report Period: 1/1/2018 - 12/31/2018 Braskem America, Inc. - Marcus Hook

Dear Mr. Rebarchak:

report is required by our Title V Permit, Section B, Condition #024. Braskem America, Inc. hereby submits the above-referenced report. This attached

the Clean Air Act, 40 CFR Part 68, and 25 Pa Code §127.512(i). hereby states that this facility is in compliance with the requirements of Section 112(r) of As required by our Title V Permit, Section B, Condition #026, Braskem America, Inc.

Please note the following contacts at the facility for Title V:

Responsible Official

8028-794 (019) Facility Manager Conway Yee

Environmental Engineer Jeffrey Hirt

Permit Contact Person

:<u>əlfiT</u>

6228 -794 (018)

Phone:

Name:

Engineer, Jeffrey Hirt, at the above number or by e-mail at jeffrey.hirt@braskem.com. If you have any questions, please do not hesitate to contact our Environmental

BRASKEM AMERICA, INC. Sincerely,

Conway Yee

Facility Manager

Air Enforcement Branch (3AP12) :00

U. S. Environmental Protection Agency, Region III

1650 Arch Street

Philadelphia, PA 19103-2029

Enclosures



# PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

## BUREAU OF AIR QUALITY COMPLIANCE CERTIFICATION FORM

(25 Pa. Code § 127.513)

Operacing remille #:	Operating Dormit #.		Contact Person:	· ax ib/i idilc.	Tax ID/Plant	- Maille	Plant Name:
23-00012			IECEDEN FIDA	23-1334498-1	JE 1E34400 4	BRASKEIVI AIVIEK INC/MARCUS HOOK	DDACKEN ANDED INC A ARCHED TO
Phone Number:		Title:		DEP Facility ID:		Owner/Operator:	
(610) 497-8229		ENVIRONMENTAL ENGINEER		515469		BRASKEM AMER INC	

For the period 1/1/2018 - 12/31/2018, BRASKEM AMER INC/MARCUS HOOK has been in continuous compliance with all applicable requirements of permit # 23-00012, determined by the method(s) of compliance specified in said permit, except for the following deviations, exceedances and excursions:

Sect./Cond. #	Citation #	Source	Noncompliance	Monitoring Method(s)	Date	Duration	Corrective Action(s)
D/#003	(a)(1)	102A	The facility	Recorded data through DCS and	3/22/18	3/33/40	
			suffered a	Pi systems during this event as	01/22/20	01/27/2	Braskem followed its loss of utility
			complete loss of	well as verbal accounts from			procedures in accordance with safe
D/#003	(a)(1)	102B	steam supply	facility personnel.			operating guidelines. Steam was
			from the utility				restored to the necessary
			provider. This				production units to allow safe
			event caused				startup and normal operation
			significant				
			portions of the				
			facility to				
			immediately				
			cease operation				
			in accordance				
			with safe				
			operating				
			procedures.				

118071			inspections performed by facility	PADEP visit on			
Braskem operations completed housekeeping efforts to remove	N/A	6/12/18	Weekly visible emission	Pursuant to a	102B		C(#014)
The facility also initiated an investigation related to these events to understand potential causes and implement necessary actions.			It should be noted that Braskem's conclusion, based on evaluation of all available information, is that the flare flame never completely extinguished. Flame outage results in certain operating conditions, notably including a loud sound accompanying a restart of the flare; these supporting indications of flare flame outage did not occur. Furthermore, there were several five second interval readings during the periods above where the thermocouples indicated the presence of a flame. Instead, during the relevant periods, it is more likely that variable flare steam flows (related to abnormal flare process gas conditions) occurring contemporaneous with high winds together caused lower thermocouple temperatures.	all three flare pilot instruments were showing failure. On 3/4/18, this instance was approximately two minutes. On 4/5/18 and 11/28/18, the instances were less than one minute. All other flare operating requirements were in the normal operating range.			
returned to a condition of flame presence.		11/20/10	dedicated to the continuous monitoring of the flare for flame presence.	reporting period where the indications from	102В	(a)(2)	D/#003
In all cases the facility closely monitored the situation to ensure that the flare instrumentation	3/4/18, 4/5/18, 11/28/18	3/4/18, 4/5/18, 11/28/18	Redundant thermocouples are installed on the flare tip	There were three instances in this	102A	(a)(2)	D/#003
				flare in excess of five minutes.			
				have been visible	· 0		
				At the initial onset of this	0 7		The state of the s
Page of	,					98 · Version 1.2	November 30 1998 : Version 1.2

November 30, 1998: Version 1.2 D/#014 D/#002 D/#012 D/#001 D/#001 D/#018 D/#015  $\equiv$ (a)  $\equiv$ (a) (a) (a) 107 107 107 106 106 103A 107 BTU/scf on three was less than 300 the sample result occasions during Braskem does not of the flare gas which resulted in was not equipped **Energy Transfer** configurations on with a cap, blind this reporting Partners (ETP), these sources, associated with own or operate an Open Ended design of several appeared to have equipment that Line condition. flange, plug, or according to accumulated on second valve pressure relief this date, it was Observed the extruder roof. polypropylene observed that valve piping pellets/solids the flare Although the Plant 2 automated control systems to Periodic sampling results and adjust flare BTU content. Visual inspections by facility personnel personnel. 6/11/18, 6/29/18, 12/24/18 6/11/18, 6/12/18 6/11/18, 12/24/18 6/29/18, N/A sample results, ETP performed the process to return the flare gas to Initiated and completed projects to preventing this accumulation in the inspected in order to confirm it was Pursuant to the discovery of the these solids from the roof. Process initiated to determine actions that operating within specifications. In engineering evaluation has been necessary adjustments to the modify field piping to eliminate equipment in this area was also potential open ended lines. may be required towards the desired conditions. housekeeping efforts, an addition to continued future.

	November 30, 1998: Version 1.2	
	on 1.2	
period.		
		Page
		of

## Certification of Truth, Accuracy and Completeness

Subject to the penalties of Title 18 Pa. C.S. Section 4904 and 35 P.S. Section 4009 (b) (2), I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this form are true, accurate, and complete.

Signed:	Name:	
M	Conway Yee	
Date:	Title:	
3/24/19	Facility Manager	

This certification must be signed by a responsible official. Any certification submitted without a valid signature will be returned.

more spaces are needed, complete additional pages using the format shown in Addendum 1. This certification does not replace requirements pertaining to the submission of malfunction and CEM reports. DO NOT include that information on this form. The owner/operator shall identify any other material information needed in this certification to also comply with section 113(c)(2) of the Clean Air Act. If

of



# PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

### BUREAU OF AIR QUALITY

## COMPLIANCE CERTIFICATION FORM

(25 Pa. Code § 127.513)

#### ADDENDUM 1

23-00012, determined by the method(s) of compliance specified in said permit, except for the following deviations, exceedances and excursions: For the period 00/00/0000 - 00/00/0000, BRASKEM AMER INC/MARCUS HOOK has been in continuous compliance with all applicable requirements of permit #

					Sect./Cond.#
					# Citation #
					Source
					Noncompliance
					Monitoring Method(s)
					Date
					Duration
					Corrective Action(s)

allow PADEP and its authorized representatives to enter the facility. Based upon knowledge, information, and belief, the facility never denied entrance to PADEP or its authorized representatives in this reporting period.  (c) Statement of law that imposes no compliance obligations and is thus not amenable to certification.  First sentence of (a), With the possible exception of those terms and conditions identified below, emission units described in this permit were in compliance with all permit terms and conditions during the compliance review period, as determined by the	conditions of this permit. Lutes a violation of the trol Act and is grounds for	Section B	[25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)] (Compliance Requirements)
atives lased ef, the or its latives od. that nce us not ation.  With on of oditions lission lis pliance s and le period,	with the conditions of this permit. constitutes a violation of the on Control Act and is grounds for	Section B	[25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)] (Compliance Requirements)
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atives lased ef, the ef, the or its latives od. that nce us not ation.			
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v PADEP and its orized representatives nter the facility. Based n knowledge,	infor	69	Entry)
v PADEP and its orized representatives nter the facility. Based	upor		(Inspection and
v PADEP and its			the CAAJ
	permittee shall allow the Department to Protection or authorized representatives of the Department to		4008 and § 114 of
plant entrance during Intermittent	ses, the	Section b	[25 Pa. Code § 127.513, 35 P.S. §
A guard is on duty at the SContinuous			
the renewal application.	the re		
fees were submitted with			(Permit Renewal)
applicable information and			& 127.5US]
deemed administratively			127.414, 127.446(e)
	<del>, +</del>		127.412, 127.413,
was submitted to PADEP	(a) An application for the reflewal of the factor points, and not was s	Section B	[25 Pa. Code §§
The renewal application   Continuous			
Compliance Status Conditions was:	in the Permit	Section	
with Terms &	Terms & Conditions Colitained	Permit	Citation Permit

	applications for plan		
	physical configurations or design details in		
	PADEP made a		
	amenable to certification.		
	Imposes no compliance		
	explanatory statement that	2000	
	The condition (c) is an		74
	the permit.		
	testing and monitoring in		
	determined by all required		
	nis permit over the		
	this possible in		
	compliance with all permit		
	in this permit were in		
	emission units described		
	deviations identified below,		
	possible exception of the		
	requirement. With the		
	compliance with this		
	V permit constitutes		
	incorporated into the Title		
	practice standards		
	operating and work		
	compliance with the		
	Braskem presumes that		
	amenable to certification		
	obligations and is thus and		
	Statement of law that		
	Second sentence of (a):		
	monitoring in the permit.		
Conditions was:			
with Terms &	in the Permit Compliance Status	occion.	
Compliance	in betermining	Section	
	Terms & Conditions Contained	Permit	Citation

Section B  (a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in reasonable time, information that the Department may request in reasonable time, information that the Department may request in reasonable time, information that the Department may request in reasonable time, information that the Department may request in the reasonable time, information that the Department modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit, or to determine compliance with the permit.  Section B  Qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA  Code § 127.541. Notifications to EPA, pursuant to 25 PA  (a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees).  (b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual	23-00012 - BRASKEM AMER INC/MARCUS HOOK  Citation Permit	R INC/MARCUS HOOK Permit	Terms & Conditions Contained	Means of Determining
sprovals/ installation permits and operating permits and operating permits that are descential for compliance with the Department may request in permit. Therefore, no determine to determine whether cause exists for modifying, revoking and resissuing, or terminating the permit. To to determine compliance with the Department may request in permit. Therefore, no determine to the cause exists for modifying, revoking and resissuing, or terminating the permit. Or to determine compliance with the permit. Or to generating and resissuing, or terminating the permit or to determine compliance with the permit and application for amneration requested by PADEP within a reasonable time. Facility has supplied copies of records requested by PADEP within a reasonable time. Supplied to permit modifications in accordance with 25 Pa. Code S 127.541. Notifications to EPA, pursuant to 25 PA Code S 127.541. Notifications to EPA, pursuant to 25 PA Code provided by the Operating permit fees were paid operating permit fees were paid by permit fees wer	Citation	Section	in the Permit	Compliance Status
Section B  (a) The permittee shall furnish to the Department, within a price applicable reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and releasuing, or terminating the permit, or to determine compliance with the permit.  Section B  (a) The permittee shall furnish to the Department, within a reasonable time, information requested by permit modifications during the term of this permit do not significant title V permit modifications or administrative qualify as minor permit modifications in accordance with 25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA  Section B  (a) The permittee shall submit an application for amenable to certification. Code § 127.541. Notifications to EPA, pursuant to 25 PA  (b) Emission Fees. The permittee shall, on or before September  (b) Emission Fees. The permittee shall, on or before September  (c) Section B  (a) The permit fees were paid according the invoice provided by the partite sea were paid by the partment. Applicable annual Title V permit fees were paid by September 1 for the previous calendar year.  (b) Section B  (c) The permittee shall, on or before September  (a) The permittee shall, on or before September  (b) Section B  (c) The permittee shall, on or before September  (d) Section B  (e) The permittee shall of the permit fees were paid by the permit fees were paid by the permit fees were paid by september 1 for the previous calendar year.  (d) Section B  (e) The permittee shall, on or before September  (d) Section B  (e) The permittee shall of the permit fees were paid by september 1 for the previous calendar year.  (e) Section B  (f) Section B  (a) The permittee shall, on or before September  (b) Section B  (c) Section B  (e) The permittee shall of the permit fees were paid by september 2 feet feet feet feet feet feet feet fe				approvals/ installation permits and operating permits which are
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Section B  (a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.  (b) Upon request, the p  (b) Upon request, the p  When permit modifications during the term of this permit do not significant. Title V permit modifications in accordance with 25 Pa  Code § 127.541. Notifications to EPA, pursuant to 25 PA  (a) The permittee shall submit an application for amendments, the permittee shall submit an application for aguested by PADEP within a reasonable time.  Statement of law that imposes no compliance obligations and is thus not amenable to certification. Statement of law that imposes no compliance obligations and is thus not accordance with 25 Pa  (a) The permittee shall submit an application for aguested by PADEP within a reasonable time.  Statement of law that imposes no compliance obligations and is thus not amenable to certification. Statement of law that imposes no compliance or provided by the provided by the permit fees were paid by permit fe				permit. Therefore, no certification is required.
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Section B  (a) The permittee shall pay fees to the Department in according the invoice Provided by the Chapter 127, Subchapter I (relating to plan approval and operating permit fees).  (b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual  (c) Statements of law that impose no compliance obligations and are thus	Significant Operating Permit		significant Title V permit modifications in accordance with 25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA	allelane to commone.
Chapter 127, Subchapter I (relating to plan approval and operating permit fees).  (b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual  (c) Statements of law that impose no compliance obligations and are thus	Viculications)	Section B	(a) The permittee shall pay fees to the Department in	Permit fees were paid
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(b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual	(Fee Payment)		operating permit fees).	Applicable annual Title V
			(b) Emission Fees The permittee shall, on or before September	permit fees were paid by September 1 for the
			1st of each year, pay applicable annual	previous calendar year.
obligations and are thus				(c) Statements of law that
				impose no compliance obligations and are thus

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK
Citation Permit

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Citation	Permit	Terms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
			certification.	
			(d) Statements of law that impose no compliance obligations and are thus not amenable to certification.	
			(e) Statements of law that impose no compliance obligations and are thus not amenable to certification.	
			(f) Statements of law that impose no compliance obligations and are thus not amenable to certification.	
[23 Fa. Code §§ 127.14(b) & 127.449] (Authorization for De	Section B	(a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide	Plant changes are reviewed within the facility's Management of	⊠Continuous □Intermittent
Minimis Emission Increases)		the Department with seven (7) days prior written n	There were no minor	
			deminimis increases of the mentioned minor sources during this compliance review period.	
			(f) Statements of law that impose no compliance obligations and are thus not amenable to certification.	
[25 Pa. Code §§ 127.11a & 127.215]	Section B	(a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in	There were no sources which were reactivated	⊠Continuous

[25 Pa. Code §§ St 127.402(d) & 127.513(1)] (Submissions)		[25 Pa. Code §§ Sec 121.9 & 127.216] (Circumvention)	(Reactivation of Sources)	Citation Permit Section
Section B		Section B		Permit Section
(a) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:  Regional Air Program Manager  PA Department of Environmental Protection  (At the address given on the permit transmittal letter, or otherwise notified)		(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, examing delaying or engaging in incremental construction,	accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will	Terms & Conditions Contained in the Permit
were submitted to the appropriate address of either PADEP or EPA.  All applications, forms, reports or compliance certifications submitted contained the required certification statement by the responsible official.	regulatory requirements.  The facility did not use a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which would conceal or dilute an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated there under during this compliance review period.	in any activity which may have been construed as circumvention of applicable permit or	review period.  The facility did not engage	Compliance Status
□Intermittent	⊠ Continuous	□Intermittent	□Intermittent  ⊠Continuous	with Terms & Conditions was:

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Citation	Citation Permit	Terms & Conditions Contained		Page 6
	Section	in the Permit	Compliance Status	Compliance
				Conditions was:
[25 Pa. Code && Se	٥	(b) Any report		
<u> </u>	ספטנוטון ס	(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit the permittee.	Monitoring, analysis, testing, and sampling procedures specified by	⊠Continuous □Intermittent
(Sampling, Testing		shall comply with any additional applicable req	as needed. There were no additional applicable	
and Monitoring Procedures)			requirements promulgated under the Clean Air Act after permit issuance.	
			Monitoring, analysis, testing, and sampling procedures specified by	
			this permit were conducted in accordance with the requirements of 25 Pa	
125 Pa Code 88	2.		the Clean Air Act, as needed.	
ter .	O ecoloii D	<ul><li>(a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:</li></ul>	Facility has maintained and made available, upon request of the Department	⊠Continuous
(Recordkeeping Requirements)			all records of required monitoring information.	
		sampling or measurements.	Facility has maintained and made available, upon	
		(2) The dates the analyses were performed.	all records required to comply with reporting	
			recordkeeping and	
		(··	emission statement requirements in 25 Pa.	

in the Permit  in addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting additional applicable reporting ander the Clean A  Specified by this permit. Moreover, there were no additional applicable requirements promulgated under the Clean A  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements promulgated under the Clean Air Act after permi	23-00012 - BRASKEM AMER INC/MARCUS HOOK	R INC/MARCUS HOOK	Tomas & Conditions Contained	Means of Determining	Compilation
In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting additional applicable requirements promulgated under the Clean A  Reporting enditional applicable requirements promulgated under the Clean A  Reporting requirements promulgated under the Clean A  Reporting requirements promulgated under the Clean Air Act after permit issuance.  Reporting requirements specified by this permit were performed, as needed, and contained the required certification statement by the responsible official.  All applications, forms, reports or compliance enditions on public permit endits of compliance of the Title V permit, and the permit each year after the date of issuance of the Title V permit, and certification satisfy this permit, for the previous year, includin  The data of compliance with the terms and conditions in this permit, and intended to satisfy this requirement.  The certification report is a statement of taw.  The permit of the permit, and intended to satisfy this requirement.  The permit and intended to satisfy this requirement.  All applications forms, reports or compliance or fifth and intended to satisfy this requirement.	Citation	Permit Section		Compliance Status	with Terms & Conditions was:
In addition to the reporting requirements promulgated under the Clean A  Moreover, there were no additional applicable reporting requirements promulgated under the Clean A  Reporting requirements promulgated under the Clean A  Reporting requirements specified by this permit issuance.  Reporting requirements specified by this permit seatement by the responsible official.  In applications, forms, reports or compliance conflication statement by the responsible official.  The first sentence of (d) imposes obligations on properties of the Title V permit, the permittee shall submit to the Department and EPA Region II requirement.  (a) One year after the date of issuance of the Title V permit, and acertification for law.  (b) One year after the date of issuance of the Title V permit, and acertification for law.  (a) One year after the date of issuance of the Title V permit, and acertification for law.  (a) One year after the date of issuance of the Title V permit, and acertification for law.  (a) One year after the date of issuance of the Title V permit, and acertification for law.  (b) Activities a policable reporting additional applicable in additio				specified by this permit.	□Intermittent
Reporting requirements specified by this permit suance.  Reporting requirements specified by this permit were performed, as needed, and contained the responsible official.  All applications, forms, reports or compliance certification statement by the responsible official.  All applications submitted contained the required certification statement by the responsible official.  The first sentence of (d) imposes obligations on pADEP and is therefore not amenable to certification by Braskem. The second sentence is a statement of law.  Section B  (a) One year after the date of issuance of the Title V permit, and the permit, the permit to the Department and EPA Region III requirement.  The certification satisfy this reports or compliance certification forms, report is mentioned to satisfy this requirement.  All applications, forms, report or compliance on pADEP and is therefore not amenable to certification by Braskem.  The second sentence is a statement of law.  The certification statement of law.  All applications, forms, report so compliance of (d) imposes obligations on pADEP and is therefore not amenable to certification by Braskem.  The second sentence is a statement of law.  All applications, forms, reports or compliance contained the required certification statement of law.  All applications, forms, reports or compliance certification statement.  All applications, forms, reports or compliance certification statement of law.  All applications, forms, reports or compliance certification statement of law.  Exports or compliance certification statement or law.	127.463(e) & 127.511(c)]			Moreover, there were no additional applicable	
Reporting requirements specified by this permit and the responsible official.  All applications, forms, reports or compliance certification statement by the responsible official.  All applications submitted contained the responsible official.  All applications submitted contained the responsible official.  All applications submitted contained the required certification statement by the responsible official.  The first sentence of (d) imposes obligations on PADEP and is therefore not amenable to certification by Braskem.  The second sentence is a statement of law.  The certification ty Braskem.  The certification ty Braskem.  The certification of the Title V permit, and intended to satisfy this requirement.  The certification in this requirement.  All applications, forms, report is intended to satisfy this requirement.  All applications on PADEP and is therefore not amenable to certification by Braskem.  The certification is attained as statement of law.  All applications, forms, report is necessary this requirement.  All applications, forms, report is necessary this requirement.  All applications submitted certification satisfy this requirement.  All applications, forms, report is necessary this requirement.  All applications submitted certification report is necessary this requirement.  All applications, forms, report is necessary this requirement.  All applications, forms, report is necessary this requirement.  All applications are required certification report is necessary this requirement.  All applications are required certification report is necessary this requirement.	(Reporting			under the Clean Air Act	
Reporting requirements specified by this permit were performed, as needed, and contained the required certification statement by the responsible official.  All applications, forms, reports or compliance certification submitted contained the required certification submitted contained the required certifications submitted contained the required certification submitted certification submitted certification submitted certification statement by the responsible official.  The first sentence of (d) imposes obligations on pADEP and is therefore not amenable to certification by Braskern. The second sentence is a statement, the permit, and the permit, and the permit, and the permit, and the permit and EPA Region III.  All applications or compliance of the Title V permit, and imposes obligations on pADEP and is therefore not amenable to certification to by Braskern. The second sentence is a statement of law.  The certification submitted certification submitted certification submitted certification submitted certification submitted certifications submitted certifications submitted contained the required certification submitted contained the required certification submitted contained the required contained the required contained the required contained the responsible official.  All applications submitted contained the required contained the responsible official.  The first sentence of (d) imposes obligations on pADEP and is therefore not amenable to contained the required contained	Requirements)			after permit issuance.	
required certification statement by the responsible official.  All applications, forms, reports or compliance certifications submitted contained the responsible official.  All applications, forms, reports or compliance certifications submitted contained the responsible official.  The first sentence of (d) imposes obligations on pADEP and is therefore not amenable to certification by Braskem. The second sentence is a statement of law.  The certification report is each year thereafter, unless specified elsewhere in the permit, and the permit, the permit the				Reporting requirements specified by this permit	
All applications, forms, reports or compliance certification submitted contained the required contained to statement by the responsible official.  The first sentence of (d) imposes obligations on PADEP and is therefore not amenable to certification by Braskem. The second sentence is a statement of law.  The certification report is intended to satisfy this requirement.  The certification report is intended to satisfy this requirement.  All applications, forms, reports or compliance certifications submitted certifications submitted.				needed, and contained the required certification statement by the responsible official.	
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PADEP and is therefore not amenable to certification by Braskem.  The second sentence is a statement of law.  The certification by Braskem. The second sentence is a statement of law.  The certification report is intended to satisfy this each year thereafter, unless specified elsewhere in the permit, and the permit, and intended to satisfy this each year shall submit to the Department and EPA Region III requirement.  All applications, forms, reports or compliance certifications submitted				The first sentence of (d) imposes obligations on	
The second sentence is a statement of law.  (a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III requirement.  a certificate of compliance with the terms and conditions in this permit, for the previous year, includin  The second sentence is a statement of law.  The certification report is intended to satisfy this requirement.  All applications, forms, reports or compliance certifications submitted				not amenable to certification by Braskem.	
(a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III requirement.  a certificate of compliance with the terms and conditions in this permit, for the previous year, includin				The second sentence is a statement of law.	
a certificate of compliance with the terms and conditions in this permit, for the previous year, includin	[25 Pa. Code § 127.513]	Section B	(a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit,	The certification report is intended to satisfy this requirement.	⊠Continuous  ☐Intermittent
	(Compliance Certification)		a certificate of compliance with the terms and conditions in this permit, for the previous year, includin	All applications, forms, reports or compliance certifications submitted	

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Citation	Permit	4		rage 8
	Section	erms & Conditions Contained	Means of Determining	Compliance
		in the Permit	Compliance Status	with Terms &
Se D			the responsible official.	
127.441(d), 127.512(i) and 40	Section B	(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release	Braskem America, Inc.	⊠Continuous
CFR Part 68]		program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information City	implemented a Risk Management Plan (RMP).	□Intermittent
(max management)		Se	Braskem America, Inc. has prepared a written RMP	
			meeting the requirements of 40 CFR Part 68. The	
			original RMP was	
			before June 21, 1999.	
			all necessary updates,	
			resubmittals as required.	
			(b) This is a historical requirement and imposes no specific requirements during the current period.	
			(c) Statement of law that imposes no compliance obligations and is thus not amenable to certification.	
			(d) In the cover letter for the facility's Annual Certification Report, the following statement was included:	
			Facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code 8	
			IIU 25 Pa. Code §	

Citation	Permit	Taura 6 0		- age 10
	Cotion	contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
(Fugitive particulate matter)	Restriction(s)	into the outdoor atmosphere from a source specified in Section C, Condition # 002 if the emissions are visible at the point the emissions pass outside the person's property.	the facility has work practices in place, in accordance with applicable regulatory requirements for PM and as specified by individual Permit terms and conditions below. These practices include a process for review and correction of deviations reported via routine "odor and visible emission inspections" and the facility's total event reporting process.  Compliance review for this term consisted of a review by Braskem America, Inc. staff of the reports and records associated with	□Intermittent
[25 Pa. Code §123.31] (Limitations)	Section C - I. Restrictions - Emission Restriction(s)	A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.	To prevent the detection of malodors outside of the property, the facility has work practices in place, in accordance with applicable regulatory requirements and as specified by individual permit terms and conditions below. These practices include a process for review and correction of deviations reported via routine "odor and visible emission"	⊠Continuous □Intermittent
			and visible emission	

(a) The failure o	[25 Pa. Code Section C - I. §123.42] Restrictions - The eministration (Exceptions) Restriction(s)	(b) Equ	(a) Equa	[25 Pa. Code Section C - I. §123.41] Restrictions - A person (Limitations) Restriction(s) the opac			Section	23-00012 - BRASKEM AMER INC/MARCUS FOOR  Citation Permit
(a) The presence of uncombined water is the only reason for failure of the emission to meet the limitations;	The emission limitations of 25 Pa. Code § 123.41 shall not apply when:		<ul><li>(a) Equal to or greater than 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour.</li></ul>	A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:			in the Permit	Terms & Conditions Contained
	obligations and are thus not amenable to certification.	the flame to smoke and add steam to mitigate smoking.	review/approval on 4/16/2009. Additionally, at the flare, an automated system is in place to measure the propensity of	observations (modified Method 22) using "Odor and Fugitive Emissions" inspection form submitted to the Department for	Performed weekly	total event reporting process, and the hydrocarbon Leak Detection and Repair program. Compliance review for this term consisted of a review by Braskem America, Inc. staff of the reports and records associated with these work practices.	Compliance status	Means of Determining
	□Intermittent	⊠Continuous		□Intermittent	⊠Continuous		Conditions was:	with Terms &

Citation	Permit	Taum 0 0		1
	o di	eills & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
		solely to train and test persons in observing the opaci		
[25 Pa. Code §129.14]	Section C - I. Restrictions - Emission	No person may permit the open burning of material in an air basin, except where the open burning operations result from:	Braskem did not conduct any of the listed fire	⊠Continuous
(Open burning operations)	Restriction(s)	(a) a fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer;	exercises that required specific Department approval.	Intermittent
		(b) any fire set for the purpose of		
[25 Pa. Code §127.441] (Operating permit terms and conditions.)	Section C - II. Testing Requirements	(a) The Department reserves the right to require exhaust stack testing of any source(s) as necessary to verify emissions for purposes including determining the correct emission fee, malfunctions, or determining compliance with any applicable requirement.	Statements of law that impose no compliance obligations and are thus not amenable to certification.	⊠Continuous □Intermittent
		(b) If at any time the Department has cause		
[25 Pa. Code §123.43] (Measuring techniques)	Section C - III. Monitoring Requirements	Visible emissions may be measured using either of the following:	This is a historical requirement which imposes requirements during performance testing. When the facility	⊠Continuous □Intermittent
		(a) A device approved by the Department and maintained to provide accurate opacity measurements.	measures visible emissions, such as during performance testing, a trained observer is used. Additionally no	
		<ul><li>(b) Observers, trained and qualified, to measure plume opacity with the naked eye or with the aid of any devices approved by the Dep</li></ul>	quantitative measurements were required during this compliance review period, thus this requirement is	
			and and redamentality	

Pa. Code Section C - III. (a) The permittee shall monitor the facility, once per operating day, for the following: Requirements (1) Odors which may be objectionable (as per 25 Pa. Code §123.31). (2) Visible Emissions (as per 25 Pa. Code §§123.41 and 123.42). (	Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK Permit Section Section
Section C - III. (a) Monitoring Requirements (1) §11 (2) 12: (3) an	
permit (	[25 Pa. Code §127.441]
(2) Visible Emissions (as per 25 Pa. Code §§ 123.42).  (3) Fugitive Particulate Matter (as per 25 Pa. and 123.2).	(Operating permit terms and conditions.)
(3) Fugitive Particulate Matter (as per 25 Pa. and 123.2).  (	

Citation	Permit	Terms & Conditions Contained		raye 14
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
			and visible emission inspections" forms are kept onsite.	
			(c) Statement of law that imposes no compliance obligations and is thus not amenable to certification.	
[25 Pa. Code §127.441]	Section C - IV. Recordkeeping		Facility has work practices	⊠Continuous
(Operating permit terms and conditions.)	requirements	25 Pa. Code § 127.511.]	accordance with accordance regulatory requirements and as	□Intermittent
		(a) The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record	specified by individual terms and conditions of this Permit. These practices include a	
		M2	correction of deviations reported via routine "odor	
			and visible emission inspections" and the facility's total event	
			reporting process.	
			Facility submitted the necessary record formats to the Department for approval on 4/16/2009.	
§127.441]	Section C - V. Reporting Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511(c).]	This certification report is intended to satisfy this	⊠Continuous
(Operating permit terms and			requirement.	Intermittent
conditions.)		(a) The permittee shall submit the following reports:	Applicable events as described in (b) and (c) were communicated to the	
		(1) An annual certificate of compliance, due by April 1st of each	Department in accordance	

[25 Pa. Code §135.3] (Reporting) [25 Pa. Code §123.1] (Prohibition of certain fugitive emissions)	Section C - V. Reporting Requirements  Section C - VI. Work Practice Standards	through December 31 of t, by March 1 of each calendar year. The reviously reported operated during the modified during the ions to prevent particulate se actions shall include, hemicals for control of dust	Reports were submitted to the Department by March 1.  (b) Statement of law that imposes no compliance obligations and is thus not amenable to certification.  To control the emissions of fugitive air contaminants, the facility has work practices in place, in accordance with applicable regulatory requirements for PM and as specified by individual terms and conditions of this permit. These practices include a process for review and correction of deviations reported via routine "odor and visible emission inspections" and the facility's total event reporting process. Compliance review for this term consisted of a review by Braskem America, Inc. staff of the reports and records associated with these work practices.  Pursuant to a PADEP visit
	Section	in the Permit	Compliance Status
		+	potition quidelines
			Hotilication Surcember
25 Pa. Code }135.3]	Section C - V. Reporting	(a) The owner or operator shall submit, by March 1 of each	Reports were submitted to the Department by March  1.
(Reporting)	Zedan en en en	year, a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same.	(b) Statement of law that imposes no compliance obligations and is thus not amenable to certification.
	A CIN WASH		To control the emissions of
[25 Pa. Code §123.1]	Practice Standards	For any source specified in Condition #002 of this Section, the	fugitive air contaminants, the facility has work
(Prohibition of certain fugitive	7.5.00	permittee shall take all reasonable actions to provon rematter from becoming airborne. These actions shall include, but not be limited to, the following:	accordance with applicable regulatory
emissions)			requirements for PM and as specified by individual
		201162 where possible of water or chemicals for control of dust	terms and conditions of
		(a) Use, Wilele possible, of water of successions	this permit. These
			practices include a
			process for review and
			reported via routine "odor
			and visible emission
			inspections" and the
			facility's total event
			reporting process.
ls			Compliance review for trils
			term consisted of a review
			by Braskelli Allielica, ilic.
			records associated with
,			these work practices.
			Pursuant to a PADEP visit
			Lalandir

Citation	Permit	<b>H</b>		9
	Society	lerms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
			observed that polypropylene pellets/solids appeared to have accumulated on the Plant 2 extruder roof.	
[25 Pa. Code §127.441]	Section C - VI. Work Practice Standards		Facility does not have any	⊠Continuous
(Operating permit terms and conditions.)		(a) The permittee shall begin to immediately implement measures, which may include for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) indentified in Section A, of th	identified sources where there was a required action to implement measures to reduce emissions.	□Intermittent
[25 Pa. Code §127.441]	Section C - VII. Additional	For the purpose of this Operating Permit:	Statement of law that	⊠Continuous
(Operating permit terms and	Requirements	(1) the Polypropylene Plant No. 1 consists of:	obligations and is thus not amenable to certification.	□Intermittent
conditions.)		Source ID 101A - Three Storage Silos		
		Source 102A - Polypropylene Mfg. Sources		
		Source ID 103A - Fugitive Sources		
		(2) the Polypropylene Plant No. 2 consists of:		
		Source ID 101B - Three Storage Silos		
		Source 102B		
[25 Pa. Code §127.441]	Section C - VII. Additional	This Operating Permit includes some requirements pursuant to 25 Pa. Code Sections 129.91 - 129.95 (RACT I) and 129.96 -	Statement of law that	⊠Continuous
(Operating permit terms and conditions.)	Requirements	129.100 (RACT II). However, all of the RACT I and RACT II requirements are not included as evaluations are ongoing. This Operating Permit will be amended when evaluation of RACT I a	obligations and is thus not amenable to certification.	□Intermittent
101A - PLANT 1, THREE STORAGE	Section D - I. Restrictions -	No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of	Based on emissions calculations using the	⊠Continuous

Certification of Continuous 23-00012 - BRASKEM AME	Certification of Continuous or Intermittent Compilance 23-00012 - BRASKEM AMER INC/MARCUS HOOK	Terms & Conditions Contained	Means of Determining	Compliance
Citation	Permit Section		Compliance Status	with Terms & Conditions was:
SILOS	Emission Bostriction(s)	particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot, when the effluent gas volume is less	design specifications in the permit application, the	□Intermittent
[25 Pa. Code §123.13]		than 150,000 dry standard cubic feet per minute.	particulate matter emissions do not exceed 0.04 grains per dry	
(Processes)			standard cubic foot.  Particulate matter	⊠Continuous
101A - PLANT 1, THREE STORAGE	Section D - I. Restrictions -	(a) Particulate Matter (PM/PM10) emissions from Plant No.1 shall be less than 7.10 tons per 12-month rolling sum.	Particulate matter emissions for the 101A silos are calculated	□Intermittent
SILOS	Emission Restriction(s)		monthly using approved	
[25 Pa. Code		(b) The polypropylene Plant Number 1 consists of:	methodologies. A 12-	
8127:441]		Source 101A - Three Storage Silos	month rolling sum is	
terms and		Source 102A - Polypropylene Mfg. Sources	against the 7.10 ton per 12	
conditions.)		Source 103A - Fugitive Sources	emission limit.	
		radditional authority of this permit condition is also derived from	VOC emissions for the	⊠Continuous
101A - PLANT 1, THREE STORAGE SILOS	Restrictions - Emission	25 Pa. Code §127.511.]	101A silos are calculated monthly using approved emission calculation	□Intermittent
[25 Pa. Code §129.99]	Too to the state of the state o	The total volatile organic compounds (VOC) emissions from the silos under this source identification shall not exceed 12.10 tons	methodologies. A 12- month rolling sum is determined and compared	
(Alternative RACT		on a 12-month rolling sum.	against the 12.10 ton per	
proposal and petition for alternative compliance			emission limit.	
schedule.)		Plant 1 shall not exceed	Production is tracked	⊠Continuous
101A - PLANT 1, THREE STORAGE SILOS	Section D - I. Restrictions - Throughput Restriction(s)	595,680,000 pounds per 12-month rolling sum.	monthly; a 12-month rolling sum production rate is calculated and	□Intermittent
[25 Pa. Code §127.441]			production limit.	

(Operating permit

Section D - I. Restrictions - Emission Restriction(s)			Source ID 103B - Fugitive Sources	ns -	Restriction(s)  VOC emissions from the silos under this source id
101B - PLANT 2, THREE STORAGE SILOS SILOS Restrictions - Emission [25 Pa. Code §123.13] (Processes)  Section D - I. No person may permit the emission into the outd of particulate matter in a manner that the concer particulate matter in the effluent gas exceeds 0.0 standard cubic foot, when the effluent gas volum 150,000 dry standard cubic feet per minute.	Section D - I. Restrictions - Emission Restriction(s)  Section D - I. Restrictions - Emission Restriction(s)	Section D - 1. Restrictions - Emission Restriction D - 1. Section D - 1. Restrictions - Emission Restriction(s)	Section D - I. Restrictions - Emission Restriction(s)  Section D - I. Restrictions - Emission Restriction(s)	Section D - I. Restrictions - Emission Restriction(s)  Section D - I. Restrictions - Emission Restriction(s)	Section D - 1. Restrictions - Emission Restriction D - 1. Section D - 1. Restrictions - Emission Restriction(s) Section D - 1. Restrictions -
	Section D - I. Restrictions - Emission Restriction(s)	Section D - I. Restrictions - Emission Restriction(s)		Section D - I. E Restrictions - Emission Restriction(s)	Section D - I. Restrictions - Emission Restriction(s) Section D - I. Restrictions -
	Section D - I.  Restrictions -  Emission  Restriction(s)	Section D - I. Restrictions - Emission Restriction(s)	Section D - I. E Restrictions - Emission Restriction(s)	Section D - I. E Restrictions - Emission Restriction(s)	Section D - I. Restrictions - Emission Restriction(s)  Section D - I. Restrictions -

Citation	Permit	Terms & Conditions Contained	Magne of Datermining	
6	Section	in the Permit	Compliance Status	with Terms &
§129.99]		shall not exceed 1.06 pounds per hour and 4.64 tons per year		conditions was:
(Alternative RACT		as 12-month rolling sum.	against the 1.06 lb/hr and	
proposal and petition for alternative			4.64 ton per 12 month rolling sum emission limit.	
schedule.)		Note:Compliance with the hourly emission limit was demonst		
101B - PLANT 2, THREE STORAGE SILOS	Section D - I. Restrictions - Emission	The Total Organic Compound (TOC) from the silo's stack shall be less than 0.10 percent by weight.	A representative test was conducted on 11/22/2011	⊠Continuous
[40 CFR Part 60	Restriction(s)		demonstrates this	
Standards of Performance for New Stationary Sources §40 CFR		stack test in May, 2017. Review of the test procedures and results by the Department's Source Test Group is pending. Depending on the results o	requirement.	
(Applicability and designation of affected facilities.)				Ÿe
101B - PLANT 2, THREE STORAGE SILOS	Section D - I. Restrictions - Throughput	Polypropylene production from Plant 2 shall not exceed 595,680,000 pounds per 12-month rolling sum.	Production is tracked monthly, a 12-month	⊠Continuous
[25 Pa. Code §127.441]	Nestriction(s)		is calculated and compared to the	
(Operating permit terms and conditions.)			production limit.	
PLANT 2, STORAGE	Section D - II. Testing	[Additional authority for these conditions is derived from 40 CFR §60.564.]	Changes such as	⊠Continuous
ode			feedstock type, or catalyst type, or of any	□Intermittent
§127.441]		(a) As per 40 CFR §60.564(a)(1), whenever changes are made in production capacity, feedstock type or catalyst type or	replacement, removal or addition of product	
(Operating permit		whenever there is an addition of a control device, the permittee	recovery equipment, are	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INCIMARCUS HOOK conditions.) terms and §127.441] SILOS THREE STORAGE 101B - PLANT 2, conditions.) terms and (Operating permit §127.441] SILOS 101B - PLANT 2, [25 Pa. Code SILOS (Operating permit terms and [25 Pa. Code THREE STORAGE conditions.) §129.100] THREE STORAGE recordkeeping demonstration and 101B - PLANT 2, requirements. [25 Pa. Code (Compliance Citation Section D - III.
Monitoring Requirements Section D - IV. Recordkeeping Requirements Recordkeeping Section D - IV. Requirements Section Permit shall determine compliance with the 40 ... [Additional authority for this permit condition is from 25 Pa. Code Section 129.100.] The permitee shall monitor the loading (polypropylene Section 129.100.] [Additional authority for this permit condition is from 25 Pa. Code production) and hours of operation of the silos on a monthly methods specified in Braskem Marcus Hook Facility Expansion [Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511 and 127.441.] Plan Approval No. 23-0012C, and a.. Project Emissions Summary, submitted by the permittee with The emissions from this source shall be calculated using the The permittee shall keep records of month rolling sum; (a) polypropylene production on a monthly basis and as a 12-Terms & Conditions Contained in the Permit are maintained in the Performance test results Change records. facility's Management of documented within the month rolling sum Production and silo hours facility environmental files production rate is are tracked monthly; a 12silos are calculated Emissions for the 101B to the production limit. calculated and compared monthly and as a 12 approved emission month rolling sum using Means of Determining production rate is month rolling sum are tracked monthly; a 12-Production and silo hours calculation methodologies calculated and compared to the production limit. **Compliance Status** ☐Intermittent Conditions was: **⊠**Continuous □Intermittent **⊠**Continuous □Intermittent with Terms & Compliance

Citation	Permit	Ta 6 A 1141		i i
	Section	cinis & Contained	Means of Determining	Compliance
	00000	In the Permit	Compliance Status	with Terms & Conditions was:
		(b) silo operating hours on a monthly basis		
101B - PLANT 2, THREE STORAGE SILOS	Section D - IV. Recordkeeping Requirements	(a) As per 40 CFR §60.565(a)(10), the permittee shall keep an up-to-date, readily-accessible record of each process operating variable that may result in an increase in the uncontrolled annual	Facility has work practices and procedures in place in accordance with	⊠Continuous □Intermittent
[40 CFR Part 60 Standards of Performance for New Stationary		emissions or the TOC weight percent, should such operating variable be changed.	applicable regulatory requirements and as specified by individual terms and conditions of	
Sources §40 CFR 60.565]		(b) As per 40 CFR §60.565(	this Permit. Changes are documented within the	
(Reporting and recordkeeping requirements.)			facility's Management of Change records.	
101B - PLANT 2, THREE STORAGE SILOS	Section D - V. Reporting Requirements	As per 40 CFR §60.565(k), the permittee shall submit to the Department semiannual reports of any change in process operation that increases the uncontrolled annual emissions or	Facility has work practices and procedures in place in	⊠Continuous ☐
[40 CFR Part 60 Standards of		the VOC weight percent of the individual stream, as recorded in 40 CFR §60.565(h).	applicable regulatory requirements and as	
New Stationary Sources §40 CFR 60.565]			terms and conditions of this Permit. Changes are documented within the	
(Reporting and recordkeeping requirements.)			Change records.  Applicable changes would be submitted in the noted semiannual report.	
102A - PLANT 1 POLYPROPYLENE MFG SOURCES	Section D - I. Restrictions - Emission Restriction(s)	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]	Emissions for the 102A sources are calculated monthly using approved	⊠Continuous □Intermittent
[25 Pa. Code §127.441]		ompounds (VOC) emissions from hall be less than 37.10 tons per	emission calculation methodologies. A 12-month rolling sum is	
		year on a re-monun forming sum.	against the 37.1 ton VOC	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK terms and POLYPROPYLENE 102A - PLANT 1 conditions.) §127.441] MFG SOURCES conditions.) [25 Pa. Code [40 CFR Part 60 MFG SOURCES POLYPROPYLENE 102A - PLANT 1 terms and (Operating permit Performance for Standards of 60.562-1 Sources §40 CFR **New Stationary** emissions. (Standards: Process Citation Restrictions -Section D - I. Restriction(s) Throughput Control Device Section D - I. Restriction(s) Efficiency Restrictions -Section Permit 595,680,000.00 pounds per 12-month rolling sum. (b) Particulate Matter (PM/PM10) emissions f... Polypropylene production for this plant shall not exceed 25 Pa. Code § 127.512(h) and 25 Pa. Code §129.99.] <u>1</u>... shall be vented and combusted in the flare that is: continuous and intermittent emission streams from the process [Additional authority for this permit condition is also derived from (a) As per 40 CFR §§60.18(c), and 60.562-1(a)(1)(i)(C), the Terms & Conditions Contained in the Permit per 12 month rolling sum. monthly; a 12-month Production is tracked limit and 7.1 ton PM limit production limit. compared to the is calculated and rolling sum production rate Facility has work practices applicable regulatory and accordance with and procedures in place in as specified by individual this Permit. These terms and conditions of correction of deviations process for review and practices include a Means of Determining inspections" and the and visible emission reported via routine "odor presence of a pilot flame facility's total event control systems in place monitored. Process were installed and are and flare flame detector flare to monitor for the Thermocouples on the reporting process. automatically re-ignite flare that both alarm and **Compliance Status** ☐Intermittent Conditions was: ⊠Intermittent \_\_Continuous with Terms & Compliance

CITATION	Permit	Terms & Conditions Contained		
	Postion		Weans of Determining	Compliance
	Occuon	in the Permit	Compliance Status	with Terms & Conditions was:
			pilots as needed.	
			There were three	
			period where the	
			indications from all three	
			flare pilot instruments were	
			instances occurred on	
			3/4/18, 4/5/18 and	
			11/28/18.	
			Performed weekly	
			Method 22) using "Odor	
			and Fugitive Emissions"	
			inspection form submitted	
			to the Department on	
	X.		at the flare, an automated	
			system is in place to	
			measure the propensity of	
			the flame to smoke and	
			add steam to mitigate	
			smoking.	
			The facility suffered a	
			complete loss of steam	
			supply from the utility	
		Ĭ.	event caused significant	
			portions of the facility to	
		u.	immediately cease	
			operation in accordance	
			with safe operating	
			procedures. At the initial	
			onset of this event there	
			may nave been visible	
			emissions at the flare in	

(Test methods and	[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.564]	102A - PLANT 1 Sec POLYPROPYLENE Tes MFG SOURCES Rec						Citation	23-00012 - BRASKEM AMER INC/MARCUS HOOK
		Section D - II. Testing Requirements					Section	Permit	ARCUS HOUK
	(a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures specified in 4	[Additional authority for this permit condition is from 25 Pa. Code 127.441.]					In the retillit	Telling Conditions	Terms & Conditions Contained
		There were no performance tests conducted during the compliance review period.	Braskem America has chosen to comply with the car seal option to prevent vent streams from bypassing the flare.	Flare exit velocity is measured using a dedicated flare flow meter. Facility records are maintained for the net heating value and the exit velocity.	All other flare operating requirements were in the normal operating range. Flare instrumentation and alarms continue to be calibrated and monitored on an established frequency.	The facility measures flare BTU value using a flare gas analyzer.	- Constitution of the minutes	Compliance Status	Means of Determining
1100710		⊠Continuous  ☐Intermittent					Conditions was:	with Terms &	Compilance

Citation	Permit	Tourne 0 O 1/2!		
	Section	in the Permit	Means of Determining Compliance Status	Compliance with Terms &
procedures.)				Conditions was:
102A - PLANT 1	Section D - III.	The permittee shall monitor the following:	Drod or	
MFG SOURCES	Requirements	(a) the hours of operation of the plant on a monthly basis, and	data are tracked monthly	Intermittent
[25 Pa. Code §127.441]		(b) data including mass flows, maintenance purge activities, or other engineering material balances necessary for emissions	department approved methodologies.	į
(Operating permit terms and conditions.)		(c) the polypropylene production on a monthly basis and		
102A - PLANT 1 POLYPROPYLENE MFG SOURCES	Section D - III.  Monitoring  Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511 and 25 Pa. Code §129.100 and 40 CFR §§ 60.18 and 64.3.]	The thermocouples on the flare monitoring for the	⊠Continuous
[40 CFR Part 60 Standards of			and flare flame detector were installed, calibrated	
Performance for New Stationary Sources §40 CFR 60 5631		(a) As per 40 CFR §60.563(a)(2) and (3), the permittee shall calibrate, maintain, and operate according to manufacturer's specifications the monitoring	maintained, and operated according to manufacturer's	
(Monitoring			engineering practices.	
requirements.)			Thermocouples on the flare to monitor for the presence of a pilot flame and flare flame detector were installed and are monitored.	
		3	Flare is part of the operator surveillance program and is inspected and maintained as part of	
			Braskem America, Inc. has chosen to comply with the	
			car seal option. A monthly	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK POLYPROPYLENE §127.441] MFG SOURCES 102A - PLANT 1 conditions.) terms and [25 Pa. Code (Operating permit §127.441] POLYPROPYLENE terms and MFG SOURCES 102A - PLANT 1 conditions.) [25 Pa. Code POLYPROPYLENE (Operating permit [40 CFR Part 60 MFG SOURCES 102A - PLANT 1 60.565]Sources §40 CFR **New Stationary** Performance for Standards of (Reporting and recordkeeping Citation Section D - IV. Recordkeeping Section D - IV.
Recordkeeping Requirements Requirements Requirements Recordkeeping Section D - IV. Section Permit methods specified in Braskem Marcus Hook Facility Expansion Plan Approval No. 23-0012C, and approved by the Department Project Emissions Summary, submitted by the permittee with The emissions from this source shall be calculated using the (1) ... (a) The permittee shall calculate emissions of (c) data including mass flows, maintenance purge activities, or other engineering material balances necessary for emiss... baghouses (a) the design exhaust air flow rate (scfm) for the elutriator The permittee shall record the following: [Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511 and 25 Pa. Code §129.100.] (b) the hours of operation of the plant on a monthly basis, and measured during each flare performance test, and shal... up-to-date, readily-accessible record of the following information (a) As per 40 CFR §60.565(a)(3), the permittee shall keep an Terms & Conditions Contained in the Permit program is in place sum in accordance with and on a 12 month rolling data are tracked monthly Production and emission car seal inspection department approved methodologies. and on a 12 month rolling data are tracked monthly Production and emission methodologies department approved sum in accordance with Means of Determining available in the The following records are determinations; continuous and exit velocity flow rate measurements content determinations, emission readings, heat performance test and records of all periods records of the pilot flame (5/17/2017): All visible the pilot flame is absent. of operations during which Compliance Status ☐Intermittent Conditions was: ∐Intermittent **⊠**Continuous with Terms & □Intermittent Compliance

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Citation	Permit	T 0 )		Lage 20
	Section	cilis a conditions contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
requirements.)			Control device was operating continuously	
50			during the performance test.	
			Records associated with the facility car seal	
			program and flare flame instrumentation are	
			maintained and retained in	
			applicable requirements.	
			Changes such as	
			feedstock type, or catalyst	
			type, or of any	
			addition of product	
			recovery equipment, are	
			facility's Management of	
			Change records.	
			Performance test results	
			facility environmental files	
102A - PLANT 1	Section D - V			
N E	Reporting Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]	Facility has submitted semiannual reports	⊠Continuous Intermittent
[40 CFR Part 60			condition.	
Standards of Performance for		(b) As per 40 CFR §60.565(k), the permittee shall submit to the Department semiannual reports, due by March 1 and Sentember		
New Stationary Sources §40 CFR 60.5651		1 each year, of the following recorded information.		
(Reporting and		(a) All periods recorded under		

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK 60.560] requirements.) recordkeeping Performance for Standards of [40 CFR Part 60 MFG SOURCES POLYPROPYLENE 102A - PLANT 1 Sources §40 CFR **New Stationary** affected facilities.) designation of (Applicability and §127.441] MFG SOURCES POLYPROPYLENE terms and 102B - PLANT 2 POLYPROPYLENE conditions.) [25 Pa. Code §127.441] MFG SOURCES 102B - PLANT 2 (Operating permit [25 Pa. Code conditions.) terms and (Operating permit Citation Section D - VII. Requirements Additional Section D - I. Restriction(s) Emission Restrictions -Restrictions -Section D - I. Restriction(s Throughput Section Permit exempt from the requirements of 40 CFR 60.562-1(a)(2) as per 40 CFR §60.560(h). Emergency vent streams, as defined in 40 CFR §60.561, are [Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).] emissions from the Polypropylene Plant No.2 shall not exceed 24.30 tons per year on a twelve (12) month rolling basis. (a) The combined Volatile Organic Compounds (VOC) 595,680,000.00 pounds per 12-month rolling sum. Polypropylene production for this plant shall not exceed (b) The combined Particulate Matt... Terms & Conditions Contained in the Permit imposes no compliance obligations and is thus not Statement of law that amenable to certification. VOC and PM emissions against the 24.3 ton VOC determined and compared approved emission calculated monthly using Means of Determining and 7.1 ton PM per 12 A 12-month rolling sum is calculation methodologies for the 102B sources are emission limit. month rolling sum rolling sum production rate Production is tracked production limit. compared to the is calculated and monthly; a 12-month Compliance Status Conditions was: Intermittent ∐Intermittent with Terms & ☐Intermittent Compliance

Section D - 1,	Citation	Permit	Terms & Conditions Contained	Means of Determining	Compliance
PYLENE Restrictions - 25 Pa. Code § 127.512(h) and 25 Pa Code § 129.99.]  art 60 Restriction(s) 26 Fa. Code § 127.512(h) and 25 Pa Code § 129.99.]  art 60 Restriction(s) 26 Fa. Code § 127.512(h) and 25 Pa Code § 129.99.]  art 60 Restriction(s) 27 Pa. Code § 127.512(h) and 25 Pa Code § 129.99.]  Art 60 Restriction(s) 28 Pa. Code § 127.512(h) and 25 Pa Code § 129.99.]  Art 60 Restriction(s) 29 Pa. Code § 127.512(h) and 25 Pa Code § 129.99.]  Art 60 Restriction(s) 20 Restriction(s) 21 Pa. Code § 127.512(h) and 25 Pa Code § 129.99.]  Art 60 Restriction(s) 21 Pa. Code § 127.512(h) and 25 Pa Code § 129.99.]  Art 60 Restriction(s) 21 Pa. Code § 127.512(h) and 25 Pa Code § 129.99.]  Art 60 Restriction(s) 22 Pa. Code § 127.99.]  Art 60 Restriction(s) 23 Pa. Code § 127.99.]  Art 60 Restriction(s) 24 Pa. Code § 127.99.]  Art 60 Restriction(s) 24 Pa. Code § 127.99.]  Art 60 Restriction(s) 25 Pa. Code § 127.99.]  Art 60 Restriction(s) 26 Pa. Code § 129.99.]  Art 60 Restriction(s) 27 Pa. Code § 129.99.]  Art 60 Restriction(s) 29 Pa. Code § 129.99.]  Art 60 Restriction(s) 20 Restriction(s) 21 Pa. Code § 129.99.]  Art 60 Restriction(s) 22 Pa. Code § 129.99.]  Art 60 Restriction(s) 22 Pa. Code § 129.99.]  Art 60 Restriction(s) 23 Pa. Code § 129.99.]  Art 60 Restriction(s) 24 Pa. Code § 129.99.]  Art 60 Restriction(s) 25 Pa. Code § 129.99.]  Art 60 Restriction(s) 26 Pa. Code § 129.99.]  Art 60 Restriction(s)		Section	in the Permit	Compliance Status	with Terms &
art 60 (a) As per 40 CFR §§60.18(c), and 60.562-1(a)(1)(i)(C), the continuous and intermittent emission streams from the process shall be vented and combusted in the flare that is:  Process  (1	NE NE	Section D - I. Restrictions - Control Device Sention Device	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h) and 25 Pa. Code §129.99.]	Facility has work practices and procedures in place in accordance with	☐Continuous
Process (1	Part 60 s of nce for onary 140 CFR		(a) As per 40 CFR §§60.18(c), and 60.562-1(a)(1)(i)(C) , the continuous and intermittent emission streams from the process shall be vented and combusted in the flare that is:	applicable regulatory and as specified by individual terms and conditions of this Permit. These practices include a process for review and	
Thermocouples on the flare to monitor for the presence of a pilot flame and flare flame detector were installed and are monitored. Process control systems in place that both alarm and automatically re-ignite flare pilots as needed.  There were three instances in this reporting period where the indications from all three flare pilot instruments were showing failure. These instances occurred on 3/4/18, 4/5/18 and 11/28/18.	(Standards: Process emissions.)		(1	correction of deviations reported via routine "odor and visible emission inspections" and the facility's total event reporting process.	
Performed weekly				Thermocouples on the flare to monitor for the presence of a pilot flame and flare flame detector were installed and are monitored. Process control systems in place that both alarm and automatically re-ignite flare pilots as needed.  There were three instances in this reporting period where the indications from all three flare pilot instruments were showing failure. These instances occurred on 3/4/18, 4/5/18 and 11/28/18.	

Citation Permit			rage 32
	Q GIIII Q	Means of Determining	Compliance
Occile	in the Permit	Compliance Status	with Terms & Conditions was:
		Flare exit velocity is measured using a dedicated flare flow meter. Facility records are maintained for the net heating value and the exit velocity.	
		Braskem America has chosen to comply with the car seal option to prevent vent streams from bypassing the flare.	
102B - PLANT 2 POLYPROPYLENE Testing MFG SOURCES Requirements	[Additional authority for this permit condition is from 25 Pa. Code 127.441.]	There were no performance tests	⊠Continuous
[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.564]	(a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures specified in 4	compliance review period.	
(Test methods and procedures.)			
102B - PLANT 2 Section D - III. POLYPROPYLENE Monitoring MFG SOURCES Requirements	The permittee shall monitor the following:  (a) the hours of operation of the plant on a monthly basis, and	Production and emission data are tracked monthly	⊠Continuous
[25 Pa. Code §127.441]	2020	department approved methodologies.	
terms and conditions.)	(c) the polypropylene production on a monthly basis and		
102B - PLANT 2 Section D - III. POLYPROPYLENE Monitoring	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511 and 25 Pa. Code §129.100 and 40 CFR	The thermocouples on the lare monitoring for the	⊠Continuous
	25 Pa. Code § 1		27.511 and 25 Pa. Code §129.100 and 40 CFR flare monitoring for the

Citation	Citation Permit	Terms & Conditions Contained	Means of Determining
Cimio:	Section	in the Permit	Compliance Status
MFG SOURCES	Requirements	§§ 60.18 and 64.3.]	presence of a pilot flame and flare flame detector
[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR		(a) As per 40 CFR §60.563(a)(2) and (3), the permittee shall calibrate, maintain, and operate according to manufacturer's specifications the monitoring	were installed, calibrated, maintained, and operated according to manufacturer's specifications and/or good engineering practices.
(Monitoring requirements.)			Thermocouples on the flare to monitor for the presence of a pilot flame and flare flame detector were installed and are monitored.
			Flare is part of the operator surveillance program and is inspected and maintained as part of plant turnaround work practices.
			Braskem America, Inc. has chosen to comply with the car seal option. A monthly car seal inspection program is in place.
102B - PLANT 2 POLYPROPYLENE MFG SOURCES	Section D - IV. Recordkeeping Requirements	The emissions from this source shall be calculated using the methods specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C, and approved by the Department herein	Production and emission data are tracked monthly and on a 12 month rolling sum in accordance with department approved
(Operating permit terms and conditions.)		(a) The permittee shall calculate emissions of	

Citation	Permit	Terms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
		(1)		
POLYPROPYLENE R	Section D - IV. Recordkeeping Requirements	The permittee shall record the following:	Production and emission data are tracked monthly	⊠Continuous
		(a) the design exhaust air flow rate (scfm) for the elutriator baghouses,	and on a 12 month rolling sum in accordance with department approved	
(Operating permit		(b) the hours of operation of the plant on a monthly basis, and	methodologies.	
conditions.)	()	(c) data including mass flows, maintenance purge activities, or other engineering material balances necessary for emiss		
102B - PLANT 2 S POLYPROPYLENE R MFG SOURCES R	Section D - IV. Recordkeeping Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511 and 25 Pa. Code §129.100.]	The following records are available in the performance test	⊠Continuous □Intermittent
Standards of Performance for New Stationary Sources §40 CFR 60.565]		(a) As per 40 CFR §60.565(a)(3), the permittee shall keep an up-to-date, readily-accessible record of the following information measured during each flare performance test, and shal	emission readings, heat content determinations, flow rate measurements, and exit velocity determinations; continuous	
(Reporting and recordkeeping requirements.)			and records of the pilot flame and records of all periods of operations during which the pilot flame is absent. Control device was operating continuously during the performance test.	
			Records associated with the facility car seal program and flare flame instrumentation are maintained and retained in accordance with applicable requirements. Changes such as production capacity.	

designation of	[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.560]	102B - PLANT 2  POLYPROPYLENE  MFG SOURCES  Section D - VII  Additional  Requirements	(Reporting and recordkeeping requirements.)	[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR	102B - PLANT 2 Section D - V. POLYPROPYLENE Reporting REQuirements			Citation Permit
		VII. Emergency vent streams, as defined in 40 CFR §60.561, are exempt from the requirements of 40 CFR 60.562-1(a)(2) as per nts 40 CFR §60.560(h).	(a) All periods recorded under	(b) As per 40 CFR §60.565(k), the permittee shall submit to the Department semiannual reports, due by March 1 and September 1 each year, of the following recorded information.	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]		in the Permit	lerms & conditions contained
		Statement of law that imposes no compliance obligations and is thus not amenable to certification.		34	semiannual reports required under this condition.	teedstock type, or catalyst type, or of any replacement, removal or addition of product recovery equipment, are documented within the facility's Management of Change records.  Performance test results are maintained in the facility environmental files	Compliance Status	
11807		181	⊠ Continuous		□Intermittent	⊠Continuous	with Terms & Conditions was:	:

Citation	Permit	Tormo 9 Onnaliting O		
	2	reillis & Collditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms &
affected facilities.)				
103A - PLANT 1 FUGITIVE SOURCES	Section D - I. Restrictions - Emission Restriction(s)	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]	Facility has a leak detection and repair program (work practice) to	⊠Continuous □Intermittent
[25 Pa. Code §127.441] (Operating permit terms and conditions.)		(a) The total Volatile Organic Compounds (VOC) emissions from the Polypropylene Plant No. 1 shall be less than 37.10 tons per year on a 12-month rolling sum.	limit fugitive emissions.  VOC emissions for the 103A sources are calculated monthly using approved emission	
		(b) Particulate Matter (PM/PM10) emissions f	calculation methodologies. A 12-month rolling sum is determined and compared against the 37.1 ton VOC and 7.1 ton PM 12 month rolling sum emission limit.	
FUGITIVE SOURCES [25 Pa. Code	Section D - I. Restrictions - Emission Restriction(s)	The Volatile Organic Compounds (VOC) emissions from the fugitive emission sources of Plant 1 shall not exceed 19.60 tons per year on a twelve (12) month rolling basis.	Facility has a leak detection and repair program (work practice) to limit fugitive emissions.	⊠Continuous □Intermittent
(Operating permit terms and conditions.)			VOC emissions for the 103A sources are calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is determined and compared against the 19.6 ton 12 month rolling sum emission limit.	
	Section D - II. Testing Requirements	[Additional authority for this permit condition is derived from 40 CFR §60.562-2(d) and 25 Pa. Code §129.71.]	There were no performance tests required under 40 CFR 60.8 for this	⊠Continuous □Intermittent
Standards of		(a) In conducting the performance tests required in 40 CFR	source during this compliance review period; thus this requirement is	

E ~ 100	7 (0 -				
§127.441] (Operating permit terms and	FUGITIVE SOURCES				Citation
	Monitoring Requirements			Section	Permit
(a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis	[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511.]		In the Permit	conditions Contained	Tarme & Candidiana Canta
detection and repair program (work practice) to limit fugitive emissions.  12-month rolling summation of VOC	Polypropylene production is monitored monthly. Facility has a leak	judgment is used to confirm the VOC content. When this determination concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program.  Through periodic review and evaluation any components that are discovered which require to be added to the LDAR program are included in the LDAR database and monitored. Braskem has a MOC process and a periodic review of scheduled maintenance activities to track any changes to LDAR components.  There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance review period.	Compliance Status	Means of Determining	
	⊠Continuous □Intermittent	<b>f</b>	with Terms & Conditions was:	Compliance	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK conditions.) SOURCES FUGITIVE 103A - PLANT 1 Standards of [40 CFR Part 60 in light liquid 60.482-2] Sources §40 CFR **New Stationary** Performance for service.) (Standards: Pumps SOURCES FUGITIVE 103A - PLANT 1 in gas/vapor service 60.482-7] Sources §40 CFR Performance for Standards of [40 CFR Part 60 and in light liquid **New Stationary** (Standards: Valves FUGITIVE service. SOURCES 103A - PLANT 1 Citation Section D - III. Monitoring Requirements Monitoring Section D - III. Requirements Section D - IV. Requirements Recordkeeping Section Permit with 40 CFR Part 60 Subpart VV (c) T... (b) Monitoring of components shall be conducted in accordance 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] [Additional authority for this permit condition is also derived from §60.485(b), except as provided in 40 CFR §60.482-1(c) and (f) monthly to detect leaks by the methods specified in 40 CFR (a)(1) Each pump in light liquid service shall be monitored [Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] the methods specified in 40 CFR §60.485(b) and shall comply with 40 CFR §60.482-7(b) through (e), except as provided in ... (a)(1) Each valve shall be monitored monthly to detect leaks by The permittee shall keep records of Terms & Conditions Contained in the Permit emissions are kept on file Facility has work practices and procedures in place, Program. of the facility LDAR including VOC monitoring reports maintained as part Facility has work practices Means of Determining including VOC monitoring and procedures in place, placed on delay of repair. All leaks were repaired Program. of the facility LDAR reports maintained as part within 15 calendar days or is monitored monthly. Polypropylene production Compliance Status 12-month rolling Conditions was: \_Intermittent **⊠**Continuous with Terms & □Intermittent Compliance **⊠**Continuous ∐Intermittent

Citation	Permit	Terms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
[25 Pa. Code §127.441]		(a) polypropylene production monthly and as a 12-month rolling sum;	summation of VOC	
(Operating permit terms and			מווויסיסויס מופ אפטר טון ווופ.	
conditions.)	2000	(b) VOC emissions monthly and as a 12-month rolling sum.		
		(c) The LDAR component monitoring.		
FUGITIVE SOURCES	Recordkeeping Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]	This condition imposes no additional requirements than those conditions	⊠Continuous □Intermittent
Standards of		(a)(1) The permittee shall comply with the recordkeeping	Facility has work practices	
New Stationary Sources §40 CFR 60.486]		(2) The permittee management of the second to the second t	and procedures in place, including VOC monitoring reports maintained as part	
(Recordkeeping		(2) The permittee may comply with the recordkeeping requirements for the sources in one record	of the facility LDAR Program	
requirements.)			Facility has work practices and procedures in place, including marked-up	
T.			P&IDs showing equipment in VOC service, as well as equipment not in VOC service.	
103A - PLANT 1 FUGITIVE SOURCES	Section D - V. Reporting Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]	Facility submitted semiannual reports as	⊠Continuous
[40 CFR Part 60			required by this condition	Intermittent
Standards of Performance for		(a) All semiannual reports to DEP shall include the following information, summarized from the information in 40 CFR	requirement and imposes no specific requirements	

	practices. The closed vent			control devices.)
				vent systems and
	and maintained as part of			(Standards: Closed
	program and is inspected			60.482-10]
	operator surveillance	(b) As per 40 CFR §60.482-10(f), except as provided in 40 CFR		Sources §40 CFR
	60 18 Flare is part of the			New Stationary
	in compliance with 40 CFR			Performance for
	by this permit, the flare is	(a) Closed vent systems and control devices illust comby with the respective provisions specified in 40 CFR § 60.482-10.		Standards of
	deviation reports required	the state of the s		
	previous semi-annual			SOURCES
□Intermittent	submitted in this	k [Additional authority for this permit condition is also 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Section D - VI. Work Practice Standards	103A - PLANT 1 FUGITIVE
⊠Continuous	Except as reported and	to a serious from		
	equivalency during the current compliance period.			
	has chosen not to apply for a determination of			(Standards: General.)
	Additionally, the facility	(b) Compilative with 40 of 13 3300. 102 1 cm.		-
	amenable to certification.	0 0		60.482-1]
	obligations and is thus not			Sources §40 CFR
	(c) Statement of law tilat	§60.480(e) for all equipment.		New Stationary
		requirements of 40 CFR §§60.482-1 through 60.482-10 or		Standards of
	Program.	(a) The permittee shall demonstrate compliance with the		[40 CFR Part 60
	reports maintained as part			SOURCES
□Intermittent	and procedures in place, including VOC monitoring	[Additional authority for this permit condition is also 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Section D - VI. Work Practice Standards	103A - PLANT 1 FUGITIVE
⊠Continuous	Facility has work practices	(2) For each month duri		
				requirements.)
	compliance review period.			(Reporting
	performance lesis	A Dooppe unit identification		60.487]
	There were no			Sources §40 CFR
	during the current period.	§60.486:		New Stationary
Conditions was:	Compliance status	in the Permit	Section	
with Terms &	D Status	leting & collabolis collianies	Permit	Citation Permit

Section in the Permit Compliance Status	system is part of the facility LDAR Program. Inspections under the facility's mechanical integrity program were conducted during this compliance review period. The closed vent system is in continuous operations when emissions may be vented through it.	All other flare operating requirements were in the normal operating range. Flare instrumentation and alarms continue to be calibrated and monitored on an established frequency.	103A - PLANT 1 Section D - VI. Work FUGITIVE  FUGITIVE  Practice Standards  40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]  Sources  CFR § 60.482-10: and CF	(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR §60.482-1 compressors are either equipped with a barrier fluid system that prevents	(Compressors.)  leakage of VOC to the atmosphere or are vented to a control device.	The AC compressors are operated with the barrier fluid at a pressure greater than the compressor
tus with Terms & Conditions was:	<u>o.</u> <u>v</u> . <sub>V</sub>	ng the ge. and	ors ©Continuous		ents , nted	are ier

Citation							
Citation Permit							
Terms & Conditions Contained							
Compliance Status	stuffing box pressure.	The barrier fluid systems are in heavy liquid service (mineral oil).	The barrier fluid systems are equipped with a sensor (low oil level) that will detect failure of the seal system and/or the barrier fluid system.	The barrier fluid systems are equipped with alarms to indicate failure of the seal system and/or the barrier fluid system. The criterion used to indicate failure of the seal system is a low oil level alarm.	(f) Statement of law that impose no compliance obligations and are thus not amenable to certification	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.	The (2) Sulzer compressors (vent recovery) are closed system and vent to the flare and are therefore
with Terms &							

Citation	Permit	Tomas 0 0		
	Section	. Ciliis & Contained	Means of Determining	Compliance
	Occupii	in the Permit	Compliance Status	with Terms & Conditions was:
			exempt from the requirements of paragraphs (a) and (b) of this condition.	
			The facility did not exempt any compressors based on this condition during the compliance review period.	
103A - PLANT 1 FUGITIVE SOURCES	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place, including VOC monitoring.	⊠Continuous
[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4]		(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than	reports maintained as part of the facility LDAR Program.  All leaks were repaired within 5 calendar days or	
(Standards: Pressure relief devices in gas/vapor service.)			placed off delay of repair.	
103A - PLANT 1 FUGITIVE SOURCES	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Sampling connection systems are equipped with	⊠Continuous
[40 CFR Part 60 Standards of Performance for New Stationary		(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-5(c)	The closed purge system is designed to capture and transport the purged fluid	
60.482-5] (Standards: Sampling connection systems.)		(b) E	The facility did not exempt any sampling systems based on this condition during the compliance review period.	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK SOURCES FUGITIVE 103A - PLANT 1 Standards of 60.482-6] Sources §40 CFR Performance for [40 CFR Part 60 ended valves or **New Stationary** SOURCES FUGITIVE 103A - PLANT 1 (Standards: Open-Performance for Standards of lines.) 60.482-8] **New Stationary** [40 CFR Part 60 Sources §40 CFR service, and devices in light liquid pressure relief liquid service, and valves in heavy (Standards: Pumps FUGITIVE connectors.) or heavy liquid SOURCES Standards of 103A - PLANT 1 [40 CFR Part 60 Citation Section D - VI. Work Practice Standards Practice Standards Section D - VI. Work Requirements Additional Section D - VII. Section Permit 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] [Additional authority for this permit condition is also derived from 2... cap, blind flange, plug, or a second valve, except as provided in (a)(1) Each open-ended valve or line shall be equipped with a 40 CFR §60.482-1(c) and 40 CFR §60.482-6(d) and (e). 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] [Additional authority for this permit condition is also derived from olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light... (a) If evidence of a potential leak is found by visual, audible, [Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] (a) Delay of repair of equipment for which leaks have been Terms & Conditions Contained in the Permit Facility has work practices including VOC monitoring and procedures in place, Program. of the facility LDAR reports maintained as part on 6/11/18 that was not equipped with a cap, blind on compressor equipment and procedures in place, Facility has work practices flange, plug, or second Observed open-ended line including VOC monitoring within 15 calendar days or Program of the facility LDAR reports maintained as part All leaks were repaired Means of Determining placed on delay of repair. Facility has work practices of the facility LDAR including VOC monitoring and procedures in place, reports maintained as part Compliance Status ⊠Intermittent ☐Continuous Conditions was: ☐Intermittent with Terms & Compliance ☐Intermittent 

	rolling sum emission limit.	(b) The combined Particulate Matt		
	A 12-month rolling sum is determined and compared against the 24.3 ton and 7.1 ton per 12 month	errissions from the Polypropylene Plant No.2 shall not exceed 24.30 tons per year on a twelve (12) month rolling basis.		(Operating permit terms and conditions.)
2	approved emission calculation methodologies.	(a) The combined Volatile Organic Compounds (VOC)		[25 Pa. Code §127.441]
⊠Continuous □Intermittent	VOC and PM emissions for the 103B sources are calculated monthly using	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]	Section D - I. Restrictions - Emission Restriction(s)	103B - PLANT 2 FUGITIVE SOURCES
	reporting consistent with 40 CFR 60.485, 60.486, and 60.487.	(b) As per 40 CFR §60.562-2(d), the per		(Standards: Equipment leaks of VOC.)
	The facility adheres to LDAR work practice for			Sources §40 CFR 60.562-2]
	LDAR program was instituted at startup.	(a) As per 40 CFR §60.562-2(a), the permittee shall comply with the requirements specified in 40 CFR §§60.482-1 through 60.482-10.		Standards of Performance for New Stationary
⊠Continuous □Intermittent	This is a historical requirement and imposes no specific requirements	40 CFR §60.562-2 and 25 Pa. Code §§127.512(h) and 129.71.]	Additional Requirements	
	repair during this compliance review period.		Section D - VII	103A - PLANT 1
	Facility has not chosen to utilize this exemption for			
	obligations and are thus not amenable to certification			(Standards: Delay of repair.)
	(b) Statement of law that impose no compliance			Sources §40 CFR 60.482-9]
	Program.	detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this e		New Stationary
Conditions was:				Performance for
with Terms &	Compliance Status	in the Permit	Section	
Compliance	Means of Determining	Terms & Conditions Contained	remit	Oltalion
age 40			Dormit	Citation

ls and FR part 60 or
radditional authority for this permit condition is derived from 40

Citation	Permit	Terms & Conditions Contained	Mann of Data
	Section		ivicalis of Determining
		In the Permit	Compliance Status
			compared with 500 ppm for determining compliance.
			For equipment that is added, engineering judgment is used to confirm the VOC content.
			When this determination concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program.
			Through periodic review and evaluation any components that are
			to be added to the LDAR program are included in the LDAR database and
			monitored. Braskem has a MOC process and a
			periodic review of scheduled maintenance activities to track any
			changes to LDAR components.
			There were no samples collected during the
			and thus, imposes no obligations during the
			current compliance review period.
FUGITIVE	Section D - III.  Monitoring  Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511.]	Polypropylene production is monitored monthly.
			racility has a leak

)	(e) Statement of law that			(Standards: Valves
	All leaks were repaired within 15 calendar days or placed on delay of repair.	with 40 CFR §60.482-7(b) through (e), except as provided in		Performance for New Stationary Sources §40 CFR
	of the facility LUAK Program.	(a)(1) Each valve shall be monitored monthly to detect leaks by		[40 CFR Part 60 Standards of
□Intermittent	and procedures in place, including VOC monitoring reports maintained as part	40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Section D - III. Monitoring Requirements	103B - PLANT 2 FUGITIVE SOURCES
⊠Continuous	Facility has work practices	the state of the condition is also derived from		(Standards: Pumps in light liquid service.)
	Program	(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b), except as provided in 40 CFR §60.482-1(c) and (f) and		[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2]
□Intermittent	and procedures in place, including VOC monitoring reports maintained as part of the facility I DAR	[Additional authority for this permit condition is also derived if of the permit condition is also derived in the permit condition in the permit condition is also derived in the permit condition in the permit condition is also derived in the permit condition in the permit condition is also derived in the permit condition in the permit conditi	Section D - III. Monitoring Requirements	103B - PLANT 2 FUGITIVE SOURCES
⊠Continuous	Escility has work practices			
		(b) Monitoring of components shall be conducted in accordance with 40 CFR Part 60 Subpart VV.		(Operating permit terms and conditions.)
	program (work practice) to limit fugitive emissions.  12-month rolling summation of VOC emissions are kept on file.	(a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis		SOURCES [25 Pa. Code §127.441]
Intermittent	detection and repair		Section	
with Terms &	Compliance Status	in the Permit	Permit	Citation
Combinance	Means of Determining	Terms & Conditions Contained	R INC/MARCUS HOOK	23-00012 - BRASKEM AMER INC/MARCUS HOOK

Citation	Permit	Torms 9 Candidians O		
	Section	contained	Means of Determining	Compliance
and in light liquid		in the Permit	Compliance Status	with Terms & Conditions was:
service.)			obligations and is thus not amenable to certification	
103B - PLANT 2 FUGITIVE	Section D - IV. Recordkeeping	The permittee shall keep records of	Polypropylene production	⊠Continuous
SOURCES	Requirements		is monthly.	□Intermittent
[25 Pa. Code §127.441]		(a) polypropylene production monthly and as a 12-month rolling sum;	12-month rolling summation of VOC	
(Operating permit			erriissions are kept on file.	
terms and conditions.)		(b) VOC emissions monthly and as a 12-month rolling sum.		
		(c) The LDAR component monitoring.		
FUGITIVE	Recordkeeping Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]	This condition imposes no additional requirements	Continuous
[40 CFR Part 60		(2)(4) The mountain - 1: 1:	elsewhere in this Section.	
Performance for New Stationary		requirements of 40 CFR §60.486.	Facility has work practices and procedures in place,	
60.486]		dkeepina	reports maintained as part of the facility I DAB	
(Recordkeeping requirements.)			Program	
			Facility has work practices and procedures in place, including marked-up	
			in VOC service, as well as equipment not in VOC service.	
			Statement of law that	-
			obligations and are thus	
			not afficiable to	

[Additional authority for this permit condition is also derived from semiannual reports as historical This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  [Additional authority for this permit condition is also derived from reports maintained as part of the facility LDAR Procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.  (b) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Additionally, the facility has chosen not to apply for a determination of equirement compliance period.  [Additional authority for this permit condition is also derived from submitted in this compliance certification or period submitted in this permit compliance certification or period.  [Intermittent imposes no condition is also derived from submitted in this permit compliance period.]  [Intermittent imposes no condition is also derived from submitted in this permit compliance period.]  [Intermittent imposes no condition is also derived from submitted in this permit compliance period.]  [Intermittent imposes no condition is also derived from submitted in this permit compliance period.]	Section D - VI. Work [Additional authority for this permit condition is also Practice Standards (a) The permittee shall demonstrate compliance wirequirements of 40 CFR §60.480(e) for all equipment.  (b) Compliance with 40 CFR §\$60.482-1 through 60.48 §60.480(e) for all equipment.  (b) Compliance with 40 CFR §\$60.482-1 to  (c) Compliance with 40 CFR §\$60.482-1 to  (d) CFR §60.562-2(a) and 25 Pa. Code §129.71.]	(Reporting requirements.)  103B - PLANT 2 Sec FUGITIVE SOURCES  [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1]  (Standards: General.)  103B - PLANT 2 FUGITIVE SOURCES
o derived from  Facility submitted semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.  (b) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Additionally, the facility has chosen not to apply for a determination of equivalency during the current compliance period.  Except as reported and submitted in this compliance certification or	S OF K	T CFR
o derived from semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  There were no performance tests conducted during the compliance review period.  So derived from Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.  (b) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Additionally, the facility has chosen not to apply for a determination of equivalency during the current compliance period.  Except as reported and	× × × × × × × × × × × × × × × × × × ×	60 P
o derived from  Facility submitted semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.  (b) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Additionally, the facility has chosen not to apply for a determination of equivalency during the current compliance period.	*	of or CFR
o derived from Facility submitted semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.  (b) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Additionally, the facility has chosen not to apply for a determination of	*	60 CFR
o derived from  Facility submitted semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.  (b) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Additionally, the facility has chosen not to apply	*	of 60 2
semiannual reports as required by this condition  This is a historical requirement and imposes during the current period.  There were no performance tests conducted during the compliance review period.  There were no performance tests conducted during the compliance review period.  Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.  (b) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Additionally, the facility	*	60 -2 CFR
semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  There were no performance tests conducted during the compliance review period.  Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.  (b) Statement of law that imposes no compliance obligations and is thus not obligations and is thus not catification.	*	for 60 CFR
o derived from  Facility submitted semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  So derived from Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.  (b) Statement of law that imposes no compliance	*	-2 -2 60 for
e following e following required by this condition This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.		2 for
o derived from Facility submitted semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  So derived from Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.	*	2
e following e following This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  So derived from Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR	*	δ κ
o derived from Facility submitted semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  So derived from Facility has work practices and procedures in place, including VOC monitoring reports maintained as part	*	2
o derived from Facility submitted semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  So derived from Facility has work practices and procedures in place, including VOC monitoring	*	2)
o derived from Facility submitted semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.  So derived from Facility has work practices		
required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.	(2) For each month duri	Reporting equirements.)
required by this condition  required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests conducted during the compliance review period.		Reporting
required by this condition This is a historical requirement and imposes no specific requirements during the current period. There were no performance tests conducted during the		) 
o derived from Facility submitted semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.  There were no performance tests	(1) Process unit identification.	60.487]
o derived from Facility submitted semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements during the current period.		Sources §40 CFR
o derived from Facility submitted semiannual reports as required by this condition  This is a historical requirement and imposes no specific requirements	§60.486:	Performance for New Stationary
o derived from Facility submitted semiannual reports as required by this condition  This is a historical report and imposes	information, summarized from the information in 40	Standards of
o derived from Facility submitted semiannual reports as required by this condition		1 1 10 10 10
o derived from Facility submitted	ents	
	Section D - V. [Additional authority for this permit conditional autho	103B - PLANT 2 Secti
compliance review period		
in the Permit Compliance Status with Terms & Conditions was:		Citation
Conditions Contained Weans of Determining	Terms &	23-00012 - BRASKEM AMER INCIMARCUS HOUR

Citation	Permit	Tonico A A Tue		Zc abe z
		reins & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms &
Standards of		(a) Closed vent systems and control dovices must		on and was.
Performance for New Stationary		the respective provisions specified in 40 CFR § 60.482-10.	by this permit, the flare is operated and maintained	
Sources §40 CFR			in compliance with 40 CFR	
60.482-10]			60.18. Flare is part of the	
		(b) As per 40 CFR §60.482-10(f), except as provided in 40 CFR	operator surveillance	
(Standards: Closed		8	program and is inspected	
vent systems and			and maintained as part of	
control devices.)			plant turnaround work	
			practices. The closed vent	
			system is part of the	
			facility LDAR Program.	
			Inspections under the	
			facility's mechanical	
			integrity program were	
			conducted during this	
			compliance review period.	
			in continuous operations	
			when emissions may be	
			vented through it.	
			All other flare operating requirements were in the	
			normal operating range.	
			alarms continue to be	
			calibrated and monitored	
			frequency.	
FUGITIVE	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR \$60.562-2(a) and 25 Pa Code \$420.741	Except for compressors	⊠Continuous
SOURCES			CFR § 60.482-10; and	□Intermittent
[40 CFR Part 60			compressors that have no	
Standards of			detectable emissions and	
Performance for		8	are subject to 40 CFR	
Sources 840 CER		E all calling priefer, except as provided in 40 CFR §60.482-1	compressors are either	
			equipped with a barrier	

Citation Permit Section
60.482-3] (Compressors.)

Citation	Permit	4		Page 54
		i erms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
			reports maintained as part of the facility LDAR Program.	
			The (2) Sulzer compressors (vent recovery) are closed system and vent to the flare and are therefore	
			exempt from the requirements of paragraphs (a) and (b) of this condition.	
			The facility did not exempt any compressors based on this condition during the compliance review period.	
FUGITIVE SOURCES	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place, including VOC monitoring.	⊠Continuous
[40 CFR Part 60 Standards of		(a) Except during pressure releases, each pressure relief device	reports maintained as part of the facility I DAR	
Performance for New Stationary		in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than	Program.	
60.482-4]			within 5 calendar days or placed on delay of repair.	
(Standards: Pressure relief devices in gas/vapor service.)				
103B - PLANT 2 FUGITIVE SOURCES	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Sampling connection systems are equipped with	⊠Continuous
[40 CFR Part 60 Standards of		(a) Each sampling connection system shall be a series of the sample of t	The closed purge system.	
		and the second s	is designed to capture and	

Citation	Citation Permit	Terms & Conditions Contained		
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
		or closed-vent system, except as	transport the purged fluid	
Performance for		82-5(c).	to a control device.	
Sources §40 CFR			The facility did not exempt	
0.482-5]			hased on this condition	
(Standards:		(D) E	during the compliance review period.	
systems.)	V.		Eacility has work practices	⊠Continuous
NT 2	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived it of the conditional authority for this permit condition is also derived it of the conditional authority for this permit condition is also derived it of the conditional authority for this permit condition is also derived it of the conditional authority for this permit condition is also derived it of the conditional authority for this permit condition is also derived it of the conditional authority for this permit condition is also derived it of the conditional authority for this permit condition is also derived it of the conditional authority for this permit condition is also derived it of the conditional authority for this permit condition is also derived it of the conditional authority for this permit condition is also derived it of the conditional authority for the co	and procedures in place, including VOC monitoring	□Intermittent
SOURCES			reports maintained as part	
[40 CFR Part 60		(a)(1) Each open-ended valve or line shall be equipped with a	Program.	
Performance for		40 CFR §60.482-1(c) and 40 CFR §60.482-6(d) and (e).		
Sources §40 CFR				
60.482-6]		(2		
(Standards: Open-				
ended valves or lines.)		in the state of th	Facility has work practices	⊠Continuous
103B - PLANT 2 FUGITIVE SOURCES	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived incined 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	and procedures in place, including VOC monitoring reports maintained as part	□Intermittent
[40 CFR Part 60		(a) If evidence of a potential leak is found by visual, audible,	of the facility LDAR Program.	
Performance for		heavy liquid service, pressure relief devices in light	(b) Statement of law that	
New Stationary Sources §40 CFR 60.482-8]			obligations and are thus not amenable to	
(Standards: Pumps			Cel ull cauch	
and valves in neavy			Facility has work practices	
liquid service, pressure relief			including VOC monitoring	
devices in light liquid			reports maintained as part	

Citation	Permit	T		Lañe 30
	Section	in the Bornit	Means of Determining	Compliance
service, and		in the Permit	Compliance Status	with Terms & Conditions was:
connectors.)			of the facility LDAR Program. All leaks were repaired within 15 calendar days or placed on delay of repair	
103B - PLANT 2 FUGITIVE SOURCES	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place, including VOC monitoring	⊠Continuous  ☐Intermittent
[40 CFR Part 60 Standards of Performance for New Stationary		(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit but to be a some or the state of the state	reports maintained as part of the facility LDAR Program.	
Sources §40 CFR 60.482-9] (Standards: Delay of repair.)		Repair of this e	(b) Statement of law that impose no compliance obligations and are thus not amenable to certification	
			Facility has not chosen to utilize this exemption for repair during this compliance review period	
103B - PLANT 2 FUGITIVE SOURCES	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2 and 25 Pa. Code §§127.512(h) and 129.71.]	This is a historical requirement and imposes	⊠Continuous
[40 CFR Part 60 Standards of Performance for New Stationary		(a) As per 40 CFR §60.562-2(a), the permittee shall comply with the requirements specified in 40 CFR §§60.482-1 through 60.482-10.	during the current period.  LDAR program was instituted at startup.	
Sources §40 CFR 60.562-2]		(h) As per 40 CEB sec 500 000	Facility has chosen not to elect this option during the current compliance period.	
(Standards: Equipment leaks of VOC.)			Facility has chosen not to apply for a determination of equivalency during the current compliance period.	
			The facility adheres to	

ntent uses ess	a liquid that contains less			
7	adherence to the vapor pressure and VOC content requirements. Facility uses	(b) VOC emissions on a monthly and 12-month rolling sumbasis.		(Operating permit terms and conditions.)
	equipment which demonstrates the			[25 Pa. Code §127.441]
į	material used in this	(a) Monthly solvent usage;		TAKIO WAGIET
al ☐Intermittent the	provided by the material supplier. Facility	The permittee shall keep records or.	Section D - IV. Recordkeeping Requirements	105 - MAINTENANCE
sen ⊠Continuous	This information has been			(Operating permit terms and conditions.)
	requirements			§127.441]
	comply with these	£1		[25 Pa. Code
ıns	uses a liquid that contains		Requirements	PARTS WASHER
ility	maintained onsite. Facility	monthly basis.	Monitoring	MAINTENANCE
nd    Continuous	Records of the MSDS and	The permittee shall monitor and record the solvent usage on a	Soption D	
	requirements	(i) To cold cleaning machines used in extreme cleaning		
	comply with these			operations)
	less than 5% VOCs to	(b) Paragraph (a) uses her uppy.		(Degreasing
	requirements. Facility	(1) Descript (2) does not apply:		§129.63]
ent	pressure and VOC content			[25 Pa. Code
	this equipment which demonstrates the	containing greater than 5% VOC by weight, measured at 20°C (68°F) containing VOCs.	Emission Restriction(s)	PARTS WASHER
□Intermittent	for the material used in	(a) The permittee shall not use any solvent with a vapor	Section D - I.	105 -
_	60.487.			
	40 CFR 60.486 and	3		
	recordkeeping and			
Conditions was:	Compilatice status	in the Permit	Section	
with Terms &	Campliance Status	lerms & Conditions Contained	Permit	Citation Permit

Citation	Permit	Tours 0 0 - 17:		
	Cotion		Means of Determining	Compliance
	occion	in the Permit	Compliance Status	with Terms & Conditions was:
105 -	000		than 5% VOCs to comply with these requirements	
MAINTENANCE PARTS WASHER [25 Pa. Code	Recordkeeping Requirements	The permittee shall maintain records of:	Facility operates this equipment in accordance with these requirements through equipment	⊠Continuous □Intermittent
§129.63]		(a) an invoice,	labeling and operating	
(Degreasing operations)		(b) a bill of sale,	liquid that contains less	
3		(c) a certificate that corresponds to a number of sales,	with these requirements	
		(d) a Safety Data Sheet (SDS), or		
		(e) other appropriate documentation acceptable to the Department may be used to comply with 25 Pa. Code 129.63.		
MAINTENANCE PARTS WASHER	Section D - VI. Work Practice Standards	A person who sells or offers for sale any solvent containing VOCs for use in a cold cleaning machine shall provide, to the purchaser, the following written information:	This information has been provided by the solvent supplier. Facility	⊠Continuous  ☐Intermittent
[25 Pa. Code §129.63]			maintains MSDS's for the material used in this	
(Degreasing operations)		(i) The name and address of the solvent supplier.	equipment which demonstrates the	
		(ii) The type of solvent including the product or vendor identi	pressure and VOC content requirements. Facility uses a liquid that contains less	
105 -	Section D - VI. Work	(1) Immersion cold cleaning machines shall have a freehoard	Espility opposites this	
MAINTENANCE PARTS WASHER	Practice Standards	ratio of 0.50 or greater.	equipment in accordance with these requirements	⊠Continuous  ☐Intermittent
[25 Pa. Code §129.63]		(2) Immersion cold cleaning machines and remote reservoir	through equipment labeling and operating	
(Degreasing			liquid that contains less than 5% VOCs to comply	
			f.d.	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK operations) 106 - PROPYLENE SPLITTER Performance for Standards of **CAVERN 4** PROCESS & 60.562-1] Sources §40 CFR **New Stationary** [40 CFR Part 60 emissions. (Standards: Process PROCESS & SPLITTER Sources §40 CFR Performance for Standards of **CAVERN 4** 106 - PROPYLENE New Stationary [40 CFR Part 60 Citation Section D - I. Restrictions -Efficiency Control Device Restriction(s) Section D - II. Requirements Testing Section Permit operating requirements in paragraph (3). In addit... Code §129.99.] [Additional authority of this permit is also derived from 25 Pa. C100) that shall be operated in compliance with the from this source shall be directed to Sunoco Flare (Source ID (a) As per 40 CFR §60.562-1(a) and (d), vent stream emissions requirements specified in 40 CFR §60.18 at ... [Additional authority for this permit condition is derived from 40 CFR §60.562-2(d) and 25 Pa. Code §129.71.] other metho... procedures the test methods in appendix A of 40 CFR part 60 or §60.8, the permittee shall use as reference methods and (a) In conducting the performance tests required in 40 CFR (i) Have a permanent, conspicuous label summarizing the Terms & Conditions Contained in the Permit with these requirements Source emissions were device during this period directed to this control accordance with these SXL flare was operating in has confirmed that the instrumentation. Braskem events listed in this report reporting period other than requirements during this as evidenced by facility sources, according to flare associated with these Although Braskem does not own or operate the Means of Determining during this reporting 6/29/18, and 12/24/18) occasions (6/11/18, 300 BTU/scf on three the flare gas was less than (ETP), the sample result of **Energy Transfer Partners** amenable to certification under 40 CFR 60.8 during performance tests required period period; thus this this compliance review There were no review period. during this compliance requirement is not **Compliance Status** ☐Continuous ⊠Intermittent Conditions was: with Terms & **⊠**Continuous ∐Intermittent Compliance

Section	in the Dannit	
	iii die remiit	Compliance Status
60.485]		The facility liege a
(Test methods and		contractor to comply with
procedures.)		the standards set forth in
		this requirement. The
		contractor follows Method
		21 to determine the
		presence of leaking
	5200	sources. The contractor
		has work practices in
		place to ensure proper
		calibration gases are use
		as described in this
		requirement.
		The facility uses a
		contractor to comply with
		the standards set forth in
		this requirement. The
		contractor follows Method
		21 to determine the
		background level. All
		potential leak interfaces
		are traversed as close to
		the interface as possible.
		The arithmetic difference
		between the maximum
		concentration indicates by
		the instrument and the
		background level is
		compared with 500 ppm
		for determining
		compliance.
		Through periodic review
		and evaluation any
		components that are
		discovered which require
		to be added to the LDAR
		program are included in

Section  In the Permit  The LDAR database and monitored. Braskem has a MOC process and a periodic review of scheduled maintenance activities to track any changes to LDAR components.  For equipment that is added, angineering judgment is used to components.  For equipment that is added, angineering judgment is used to confirm the VOC content. When this determination concludes that the piece of equipment is in VOC content. When this determination concludes that the piece of equipment is in VOC content. When this determination of contents are no samples collected during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance review period.  [Additional authority for this permit condition is also derived from laments of components shall monitor the polypropylene production on limit fugitive emissions. In the program (work practice) to imit fugitive emissions are kept on file.  [As Monitoring of components shall be conducted in accordance.]	23-00012 - BRASKEM AMER INC/MARCUS HOOK Permit Permit	Permit	Terms & Conditions Contained	Means of Determining	Compliance
the LDAR database and monitored. Braskem has a MOC process and a MoC process and a MoC process and a periodic review of scheduled maintenance artivities to track any changes to LDAR components.  For equipment is used to comform the VOC content. When this determination concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program. There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance review period.  Section D - III. [Additional authority for this permit condition is also derived from production or being the current compliance review period.  [At Manufaction of Components shall be conducted in accordance of the current compliance and repair period detection and repair period de	Citation	Section	in the Permit	Compliance Status	with Terms & Conditions was:
MOC process and a periodic review of scheduled maintenance activities to track any changes to LDAR activities to LDAR components.  For equipment that is added, engineering judgment its used to confirm the VOC content. When this determination concludes that the piece of equipment its used to confirm the VOC content. When this determination concludes that the piece of equipment is in VOC service, it is added to the facility s LDAR program. There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance review period.  Section D - III.  Additional authority for this permit condition is also derived from is monitored monthly.  As Requirements  (a) The permittee shall monitor the polypropylene production on immit fugitive emissions. 12-month rolling summation of VOC emissions are kept on file.				the LDAR database and monitored. Braskem has a	
scheduled maintenance scheduled maintenance activities to track any changes to LDAR components.  For equipment that is added, engineering judgment is used to confern the VOC content. When this determination concludes that the piece of equipment is in VOC service, it is added to the facility is LDAR program.  There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance period is monitoring a monitor the polypropylene production is monitored monthly. Facility has a leak detection and repair program (work practice) to limit fuglitive emissions.  12 month rolling summation of VOC emissions are kept on file.				MOC process and a	
activities to track any activities to track any changes to LDAR components.  For equipment that is added, engineering added to the facility's LDAR program.  There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance period.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from is added to the facility has a leak decreased				scheduled maintenance	
changes to LDAR components.  For equipment is is added, engineering added, engineering pudgment is used to confirm the VOC content. When this determination concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program.  There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance period and thus, imposes no obligations during the current compliance review period.  [Additional authority for this permit condition is also derived from biligations during the current compliance review period.  [Additional authority for this permit condition is also derived from biligations during the current compliance review period.  [Additional authority for this permit condition is also derived from biligations during the current compliance review period.  [Additional authority for this permit condition is also derived from biligations during the current compliance review period.  [Additional authority for this permit condition is also derived from biligations during the current compliance review period.  [Additional authority for this permit condition is also derived from biligations during the current compliance review period.  [Additional authority for this permit condition is also derived from biligations during the current compliance review period.  [Additional authority for this permit condition is also derived from biligations during the current compliance review period.  [Additional authority for this permit condition is also derived from biligations during the current compliance period and thus, imposes no obligations during the current compliance production is monitored from biligations during the current compliance review period.  [Additional authority for this permit condition is also derived from biligations during the current compliance period and thus, imposes no obligations are leaf to the facility's LDAR program.  [Additional authority for this permit condition is also derived from biligations during the c				activities to track any	
components.  For equipment that is added, engineering judgment is used to confirm the VOC content. When this determination concludes that the plece of equipment is in VOC service, it is added to the facility's LDAR program.  There were no samples collected during the current compliance period.  Polypropylene production on a monthly and on a 12-month rolling basis.  Section D - III. [Additional authority for this permit condition is also derived from period. Polypropylene production and repair program (work practice) to limit fugitive emissions. 12-month rolling summation of VOC emissions are kept on file.				changes to LDAR	
For equipment that is added, engineering judgment is used to confirm the VOC content. When this determination concludes that the plece of equipment is in VOC service, it is added to the facility's LDAR program.  There were no samples collected during the current compliance period.  Polypropylene production on a monthly and on a 12-month rolling basis.  For equipment that is added, engineering judgment is in VOC service, it is added to the facility's LDAR program.  There were no samples collected during the current compliance period.  Polypropylene production on is monitored monthly. Facility has a leak detection and repair program (work practice) to limit fugitive emissions. 12-month rolling summation of VOC emissions are kept on file.				components.	
added, engineering judgment is used to confirm the VOC content.  When this determination concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program.  There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance review period.  Requirements  (a) The permittee shall monitor the polypropylene production is amonthly and on a 12-month rolling basis.  (b) Monitoring of components shall be conducted in accordance emissions are kept on file.				For equipment that is	
PYLENE Section D - III. Section D - III.  [Additional authority for this permit condition is also derived from a monthly and on a 12-month rolling basis.  [Additional formoments shall be conducted in accordance emissions are kept on file.				added, engineering indoment is used to	
When this determination concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program.  There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance period.  Section D - III.  [Additional authority for this permit condition is also derived from a current compliance review period.  [Additional authority for this permit condition is also derived from a monitored monthly. Facility has a leak detection and repair program (work practice) to limit fugitive emissions. 12-month rolling summation of VOC emissions are kept on file.				confirm the VOC content.	
concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program.  There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance review period.  Section D - III.  Monitoring 8. Requirements  (a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis.  (a) The permittee shall monitor the polypropylene production on imit fugitive emissions.  12-month rolling summation of VOC emissions are kept on file.				When this determination	
PYLENE Section D - III. Monitoring Requirements  (a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis.  Permit  (b) Monitoring  (c) Monitoring  (d) Monitoring of components shall be conducted in accordance emissions are kept on file.	He.			concludes that the piece of	
There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance period.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from is monitored monthly.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from period.  [Additional authority for this permit condition is also derived from period.  [Additional authority for t				service, it is added to the	
PYLENE Section D - III.  [Additional authority for this permit condition is also derived from Monitoring & Requirements  [Additional authority for this permit condition is also derived from is monitored monthly. Facility has a leak detection and repair program (work practice) to limit fugitive emissions.  [Additional authority for this permit condition is also derived from is monitored monthly. Facility has a leak detection and repair program (work practice) to limit fugitive emissions.  [Additional authority for this permit condition is also derived from is monitored monthly. Facility has a leak detection and repair program (work practice) to limit fugitive emissions.  [Additional authority for this permit condition is also derived from is monitored monthly. Facility has a leak detection and repair production on limit fugitive emissions.  [Additional authority for this permit condition is also derived from is monitored monthly. Facility has a leak detection and repair portion.  [Additional authority for this permit condition is also derived from is monthly. Facility has a leak detection and repair portion.]				There were no samples	
PYLENE Section D - III. [Additional authority for this permit condition is also derived from Monitoring & Requirements (a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis.  [A) Monitoring of components shall be conducted in accordance emissions are kept on file.				collected during the	
PYLENE Section D - III.  [Additional authority for this permit condition is also derived from Monitoring 25 Pa. Code §127.511.]  Requirements  (a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis.  (b) Monitoring of components shall be conducted in accordance emissions are kept on file.				and thus, imposes no	
PYLENE Section D - III.  [Additional authority for this permit condition is also derived from is monitored monthly. 25 Pa. Code §127.511.]  Requirements  (a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis.  (b) Monitoring of components shall be conducted in accordance emissions are kept on file.				current compliance review period.	
Requirements (a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis.  (b) Manitoring of components shall be conducted in accordance is monitored monthly.  [Authoritoring 25 Pa. Code §127.511.]  [Facility has a leak detection and repair program (work practice) to limit fugitive emissions.  12-month rolling summation of VOC emissions are kept on file.		:	radditional authority for this permit condition is also derived from	Polypropylene production	⊠Continu □
(a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis.	SPLITTER	Section D - III.  Monitoring	25 Pa. Code §127.511.]	is monitored monthly. Facility has a leak	□Intermi
(a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis.	PROCESS &	Requirements		detection and repair	
a monthly and on a 12-month rolling basis.  permit  (b) Monitoring of components shall be conducted in accordance	CAVERN 4			limit fugitive emissions.	
permit  (b) Monitoring of components shall be conducted in accordance	[25 Pa. Code §127.441]		a monthly and on a 12-month rolling basis.	12-month rolling summation of VOC	
	(Operating permit		(b) Monitoring of components shall be conducted in accordance	emissions are kept on file.	

Citation	Permit	Tomas o Carallelana		- aga 02
	Section	in the Permit	Means of Determining Compliance Status	Compliance with Terms & Conditions was:
		(c)		
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place, including VOC monitoring	⊠Continuous □Intermittent
[40 CFR Part 60 Standards of		(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR \$60,485(b), excent as provided in 40 CFB \$60,485(b).	reports maintained as part of the facility LDAR Program	
New Stationary Sources §40 CFR 60.482-2]		and	Facility is not claiming an exemption under this condition (d), thus this is	
(Standards: Pumps in light liquid service.)			certification during this compliance review period.	
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place, including VOC monitoring	⊠Continuous □Intermittent
[40 CFR Part 60 Standards of		(a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b) and shall comply with 40 CFR §60.482.7(b) through (c)	of the facility LDAR Program.	<b>****</b>
New Stationary Sources §40 CFR 60.482-7]		יייי אינייין (בי) מוויטעטוו (e), except as provided in	All leaks were repaired within 15 calendar days or placed on delay of repair.	
(Standards: Valves in gas/vapor service and in light liquid service.)			(e) Statement of law that imposes no compliance obligations and is thus not amenable to certification.	
			Through periodic review and evaluation any components that are discovered which require to be added to the LDAB	
			to be added to the LDAR	

in the Permit  In the Permit  In the Permit  In the Permit  In the Permit technicity for this permit condition is also derived from 25 Pa. Code § 127.511]  In the permittee shall keep the following records.  In permittee shall keep the following records.  In the permittee shall keep the following records.  In the permittee shall keep the following records.  In the permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.  In the Permittee may comply with the recordkeeping requirements for the sources in one record	23-00012 - BRASKEW AMER INCIMARCOS ITOCIA	INCIMARCOCITOCI	Terms & Conditions Contained	Mediis of Determining	
PYLENE  Section D - IV.  Recordkeeping 25 Pa. Code § 127.5111  Requirements  The permittee shall keep the following records.  (a) the polypropylene production on a monthly and on a 12-month rolling basis.  (b) LDAR component monitoring  (c) the VOC emissions on a monthly and on a 12-month rolling basis.  Section D - IV.  Recordkeeping 740 CFR §60.562-2(e) and 25 Pa. Code § 129.71.]  Requirements (a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.  (c) The permittee may comply with the recordkeeping requirements for the sources in one record	Citation	Section		Compliance Status	with Terms & Conditions was:
PYLENE Section D - IV. [Additional authority for this permit condition is also derived from Recordkeeping Requirements   25 Pa. Code § 127.511]   11				program are included in the LDAR database and monitored Braskem has a	
PYLENE  Section D - IV.  Recordkeeping  & Requirements  The permittee shall keep the following records.  permit  (a) the polypropylene production on a monthly and on a 12-m  (b) LDAR component monitoring  (c) the VOC emissions on a monthly and on a 12-m  PYLENE  Section D - IV.  Recordkeeping  Requirements  (c) the VOC emissions on a monthly and on a 12-m  (c) the VOC emissions on a monthly and on a 12-m  (d) CFR §60.562-2(e) and 25 Pa. Code §129.71.]  Requirements  (a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.  (a) The permittee may comply with the recordkeeping requirements for the sources in one record				monitored. Braskem has a MOC process and a	
PYLENE Section D - IV. Recordkeeping & Requirements The permittee shall keep the following records.  (a) the polypropylene production on a monthly and on a 12-month rolling basis.  (b) LDAR component monitoring (c) the VOC emissions on a monthly and on a 12-month rolling basis.  (c) the VOC emissions on a monthly and on a 12-month rolling basis of a CFR §60.562-2(e) and 25 Pa. Code §129.71.]  Recordkeeping (a) (1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.  (a) (1) The permittee may comply with the recordkeeping requirements for the sources in one record.				periodic review of	
PYLENE  Section D - IV.  Recordkeeping  & Requirements  The permittee shall keep the following records.  (a) the polypropylene production on a monthly and on a 12- month rolling basis.  (b) LDAR component monitoring  (c) the VOC emissions on a monthly and on a 12-m  (c) the VOC emissions on a monthly and on a 12-m  (d) the polypropylene production on a monthly and on a 12-m  (e) the VOC emissions on a monthly and on a 12-m  (f) the VOC emissions on a monthly and on a 12-m  (g) the VOC emissions on a monthly and on a 12-m  (g) the polypropylene production on a monthly and on a 12-m  (g) the polypropylene produc				scheduled maintenance	
PYLENE Section D - IV. Recordkeeping & Requirements  The permittee shall keep the following records.  (a) the polypropylene production on a monthly and on a 12-month rolling basis.  (b) LDAR component monitoring  (c) the VOC emissions on a monthly and on a 12-multipart for this permit condition is also derived from a 12-multipart for this permit condition is also derive				changes to LDAR	
Section D - IV. Recordkeeping  & Requirements  The permittee shall keep the following records.  (a) the polypropylene production on a monthly and on a 12-month rolling basis.  (b) LDAR component monitoring  (c) the VOC emissions on a monthly and on a 12-medition is also derived from Recordkeeping Requirements  (a) the polypropylene production on a monthly and on a 12-month rolling basis.  (b) LDAR component monitoring  (c) the VOC emissions on a monthly and on a 12-medition is also derived from Recordkeeping requirements of 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]  Requirements  (a) (1) The permittee shall comply with the recordkeeping requirements for the sources in one record				components.	
Requirements  The permittee shall keep the following records.  It also de	106 - PROPYLENE	Section D - IV.	his permit condition is also	Polypropylene production is monitored monthly.	⊠Continuous  ☐Intermittent
Je (a) the polypropylene production on a monthly and on a 12-month rolling basis.  (b) LDAR component monitoring  (c) the VOC emissions on a monthly and on a 12-m  [Additional authority for this permit condition is also derived from Recordkeeping Requirements  (a) (1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.  (c) the VOC emissions on a monthly and on a 12-m  [Additional authority for this permit condition is also derived from Recordkeeping requirements of 40 CFR §60.486.]		Requirements	to a control of the following records	12-month rolling	
(a) the polypropylene production on a monthly and on a 12-month rolling basis.  (b) LDAR component monitoring  (c) the VOC emissions on a monthly and on a 12-m  (c) the VOC emissions on a monthly and on a 12-m  [Additional authority for this permit condition is also derived from Recordkeeping Requirements  (a) (1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.  (2) The permittee may comply with the recordkeeping requirements for the sources in one record	CAVERN 4		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	emissions are kept on file.	
(c) the VOC emissions on a monthly and on a 12-m  [Additional authority for this permit condition is also derived from Recordkeeping S & Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived from Requirements  [Additional authority for this permit condition is also derived fr	[25 Pa. Code §127.441]		ne production on a monthly and		
(c) the VOC emissions on a monthly and on a 12-m  [Additional authority for this permit condition is also derived from Recordkeeping Requirements  [A)  [A)  [A)  [A)  [A)  [A)  [A)  [A	(Operating permit terms and				
CENE Section D - IV. Recordkeeping Requirements  (a) (1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.  (2) The permittee may comply with the recordkeeping requirements for the sources in one record	conditions.)		(b) LDAR component monitoring		
TLENE Section D - IV. Recordkeeping Requirements  (a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.  (b) The permittee may comply with the recordkeeping requirements for the sources in one record				69	
Section D - IV. Recordkeeping Requirements  (a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.  for  3179 CFR  (2) The permittee may comply with the recordkeeping requirements for the sources in one record			(c) the VOC emissions on a monthly and on a 12-m		Continuous
(a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.  for ary CFR (2) The permittee may comply with the recordkeeping requirements for the sources in one record	106 - PROPYLENE	Section D - IV.	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]	This condition imposes no additional requirements	☐Intermittent
(a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.  (2) The permittee may comply with the recordkeeping requirements for the sources in one record	PROCESS &	Requirements		elsewhere in this Section.	
requirements of 40 CFR §60.486.  (2) The permittee may comply with the recordkeeping requirements for the sources in one record			(a)(1) The permittee shall comply with the recordkeeping	Facility has work practices	
(2) The permittee may comply with the recordkeeping requirements for the sources in one record	Standards of		requirements of 40 CFR §60.486.	and procedures in place, including VOC monitoring	
requirements for the sources in one record	Performance for New Stationary		the record keeping	reports maintained as part of the facility LDAR	
Keeping	Sources §40 CFR 60 4861		requirements for the sources in one record	Program	D;
	(Recordkeeping			Facility has work practices and procedures in place,	

Citation	Dormit	***		
		i eritis & Conditions Contained	Means of Determining	Compliance
	section	in the Permit	Compliance Status	with Terms & Conditions was:
requirements.)			including marked-up P&IDs showing equipment in VOC service, as well as equipment not in VOC service.	
			Statement of law that impose no compliance obligations and are thus not amenable to certification during this compliance review period	
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4	Section D - IV. Recordkeeping Requirements	[Additional authority of this permit is also derived from 25 Pa. Code §129.100.]	Braskem America, Inc. has chosen to comply with the car seal option. A monthly car seal inspection	⊠Continuous □Intermittent
[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60 5651		(a) As per 40 CFR §60.565(b)(2), the permittee shall keep the following records for vent system containing valves that could divert the emission stream away from the flare:	program is in place. Changes such as production capacity, feedstock type, or catalyst type, or of any	
(Reporting and recordkeeping requirements.)		(1) All periods when flow is indicated if fl	replacement, removal or addition of product recovery equipment, are documented within the facility's Management of Change records.  Performance test results are maintained in the facility environmental files.	
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4	Section D - V. Reporting Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]	Facility submitted semiannual reports as required by this condition	⊠Continuous □Intermittent
[40 CFR Part 60 Standards of		(a) All semiannual reports to DEP shall include the following information, summarized from the information in 40 CFR	This is a historical requirement and imposes no specific requirements	

1)0012 - BRASKEM AME	Certification of Continuous or Intermittent Computation 23-00012 - BRASKEM AMER INC/MARCUS HOOK Permit Permit	Terms & Conditions Contained	Means of Determining
Chanon	Section	in the Permit	Compliance Status
			during the current period.
Performance for New Stationary	outre of	000.100	There were no
Sources §40 CFR 60.487]		(1) Process unit identification.	performance tests conducted during the compliance review period.
(Reporting requirements.)		(2) For each month duri	
		The permittee shall submit to DEP semiannual reports of all	Braskem has submitted
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4	Section D - V. Reporting Requirements	The permittee shall submit to DEF seminal liber is the periods recorded under 40 CFR §60.565(b) when the vent stream has been diverted from the flare.	the applicable information in the semi-annual reports. No vent streams were diverted from the flare in
[40 CFR Part 60 Standards of			this reporting period.
New Stationary Sources §40 CFR 60.565]			
(Reporting and recordkeeping requirements.)			- The state of the
106 - PROPYLENE SPLITTER PROCESS &	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	and procedures in place, including VOC monitoring reports maintained as part
CAVERN 4 [40 CFR Part 60		(a) The permittee shall demonstrate compliance with the	Program.
Standards of Performance for		§60.480(e) for all equipment.	(c) Statement of law that imposes no compliance
New Stationary Sources §40 CFR 60.482-1]		(b) Compliance with 40 CFR §§60.482-1 to	amenable to certification.  Additionally, the facility
(0+050)			has chosen not to apply

⊠Continuous	Except for compressors	y contained is also delived from	Practice Standards	
	The closed vent system is part of the facility LDAR Program. Inspections under the facility's mechanical integrity program were conducted during this compliance review period. The closed vent system is in continuous operations when emissions may be vented through it.	Additional authority for this possition is also be a second and authority for this possition is also be a second authority for the second auth	Section D - VI. Work	106 - PROPYLENE
3	not own or operate the flare associated with these sources, according to Energy Transfer Partners (ETP), the sample result of the flare gas was less than 300 BTU/scf on three occasions (6/11/18, 6/29/18, and 12/24/18) during this reporting period.			(Standards: Closed vent systems and control devices.)
	deviation reports, the Sunoco flare is operated and maintained in compliance with 40 CFR 60.18.	(a) Closed vent systems and control devices must comply with the respective provisions specified in 40 CFR § 60.482-10.  (b) As per 40 CFR §60.482-10(f), except as provided in 40 CFR §		[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10]
☐Continuous ⊠Intermittent	Except as reported and submitted in Sunoco's compliance certification or previous semi-annual	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Section D - VI. Work Practice Standards	106 - PROPYLENE SPLITTER PROCESS & CAVERN 4
with Terms & Conditions was:	Compliance Status	in the Permit	Section	
College	Means of Determining	Terms & Conditions Contained	Permit	Citation

			New Stationary
ectable of less than	(a) Except during pressure releases, each process in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than		[40 CFR Part 60 Standards of
elief devic		Section D - VI. Work Practice Standards	106 - PROPYLENE SPLITTER PROCESS & CAVERN 4
derived from			
			(Compressors.)
			New Stationary Sources §40 CFR 60.482-3]
).482-1	to the atmosphere, except as provided in 40 CFR §60.482-1		Standards of Performance for
stem that age of VOC	(a) Each compressor shall be equipped with a seal system that		CAVERN 4
			PROCESS &
	40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]		SPITTER
	in the Permit	Section	746 (1900) 1000 (1900) 1000 (1900)
	Terms & Conditions Collidilled	Permit	Citation Permit

Citation	Permit	Terms & Conditions Contained		
	Section	Collaboration	Weans of Determining	Compliance
	Occiton	in the Permit	Compliance Status	with Terms & Conditions was:
Sources §40 CFR 60.482-4]			placed on delay of repair.	
(Standards: Pressure relief devices in gas/vapor service.)	9			
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Sampling connection systems are equipped with a closed purge system.	⊠Continuous □Intermittent
[40 CFR Part 60 Standards of Performance for New Stationary		(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-5(c).	The closed purge system is designed to capture and transport the purged fluid to a control device.	
Sources §40 CFR 60.482-5] (Standards: Sampling connection		(b) E	The facility did not exempt any sampling systems based on this condition during the compliance	
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part	⊠Continuous □Intermittent
[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR		(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-6(d) and (e).	of the facility LDAR Program.	
(Standards: Open- ended valves or lines.)		(2		

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK SPLITTER **CAVERN 4** PROCESS & 106 - PROPYLENE and valves in heavy 60.482-8] Sources §40 CFR **New Stationary** Performance for Standards of [40 CFR Part 60 pressure relief liquid service, (Standards: Pumps or heavy liquid devices in light liquid PROCESS & connectors.) service, and (Operating permit terms and §127.441] **CAVERN 4** SPLITTER SPLITTER conditions.) [25 Pa. Code 106 - PROPYLENE PROCESS & **CAVERN 4** 106 - PROPYLENE Performance for Standards of [40 CFR Part 60 Citation Section D - VI. Work Practice Standards Section D - VII. Requirements Additional Section D - VII. Requirements Additional Section Permit 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] [Additional authority for this permit condition is also derived from heavy liquid service, pressure relief devices in light... olfactory, or any other detection method at pumps and valves in (a) If evidence of a potential leak is found by visual, audible, vent emissions: [Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.] treatment equipment The source consists the following equipment and associated Three (3) propylene dryers (V-54A, V54-B, and V-54C) Cavern #4 Two (2) splitters and associated pre-treatment and postdetected will be allowed if repair within 15 days is technically (a) Delay of repair of equipment for which leaks have been Terms & Conditions Contained in the Permit Facility has work practices and procedures in place, Program. of the facility LDAR reports maintained as part including VOC monitoring placed on delay of repair. within 15 calendar days or All leaks were repaired amenable to certification. obligations and is thus not imposes no compliance Statement of law that Means of Determining Facility has work practices including VOC monitoring and procedures in place, Program. of the facility LDAR reports maintained as part (b) Statement of law that Compliance Status **⊠**Continuous Intermittent Conditions was: ∐Intermittent **⊠**Continuous with Terms & ☐Intermittent Compliance

Citation	Permit	Torme & Conditions Contained		rage / o
	Section	. Conditions contained	Means of Determining	Compliance
New Stationary	oaction	in the Permit	Compliance Status	with Terms & Conditions was:
Sources §40 CFR 60.482-9]		inleasible without a process unit shutdown. Repair of this e	impose no compliance obligations and are thus not amenable to	
(Standards: Delay of repair.)			certification	
7			Facility has not chosen to utilize this exemption for repair during this compliance review period.	
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2 and 25 Pa. Code §§127.512(h) and 129.71.]	This is a historical requirement and imposes no specific requirements	⊠Continuous □Intermittent
[40 CFR Part 60 Standards of Performance for		(a) As per 40 CFR §60.562-2(a), the permittee shall comply with the requirements specified in 40 CFR §§60.482-1 through 60.482-10.	LDAR program was instituted at startup.	
New Stationary Sources §40 CFR 60.562-2]		(b) As per 40 CFR §60.562-2(d), the per	Facility has chosen not to elect this option during the current compliance period.	
(Standards: Equipment leaks of VOC.)			Facility has chosen not to apply for a determination of equivalency during the current compliance period.	
			The facility adheres to LDAR work practice for recordkeeping and reporting consistent with 40 CFR 60.486 and 60.487.	
107 - PROPYLENE UNLOADING RACK	Section D - I. Restrictions - Control Device	opylene occurs at this uted to a flare that meets	Source emissions were directed to this control	Continuous
[25 Pa. Code §127.441]	Efficiency Restriction(s)	the requirements of 40 CFR §60.18.	device during this period as evidenced by facility	⊠Intermittent
terms and			has confirmed that the SXL flare was operating in	

Citation Permit Section	conditions.)		107 - PROPYLENE UNLOADING RACK	[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-1]	emissions.)
Permit Section			Section D - I. Restrictions - Control Device	Efficiency Restriction(s)	
Terms & Conditions Contained in the Permit			[Additional authority of this permit is also derived from 25 Pa. Code §129.99.]	(a) As per 40 CFR §60.562-1(a) and (d), vent stream emissions from this source shall be directed to Sunoco Flare (Source ID C100) that shall be operated in compliance with the requirements specified in 40 CFR §60.18 at	
Compliance Status	accordance with these requirements during this reporting period other than events listed in this report.	Although Braskem does not own or operate the flare associated with these sources, according to Energy Transfer Partners (ETP), the sample result of the flare gas was less than 300 BTU/scf on three occasions (6/11/18, 6/29/18, and 12/24/18) during this reporting period.	Source emissions were directed to this control device during this period	as evidenced by racing instrumentation. Braskem has confirmed that the SXL flare was operating in accordance with these requirements during this reporting period other than events listed in this report.	Although Braskem does not own or operate the flare associated with these sources, according to Energy Transfer Partners (ETP), the sample result of the flare gas was less than 300 BTU/scf on three occasions (6/11/18,
with Terms & Conditions was:			☐Continuous		

INE Section ACK Testing Require	Citation	Permit	Tarme & Conditions Contained		
VLENE Section D - II. [Additional authority for this permit condition is derived from 40 period.  CFR §60.562-2(d) and 25 Pa. Code §129.71.]  (a) In conducting the performance tests required in 40 CFR part 80 or thus this spondiance review period.  Ss and other metho  There were no performance tests required in 40 CFR part 80 or dimer methods in appendix A of 40 CFR part 80 or dimer the standards set forth in place to ensure proper calibration of this requirement. The contractor to comply with the standards set forth in the s		Section		Means of Determining	Compliance
WLENE Section D - II.  GRACK Testing  Additional authority for this permit condition is derived from 40  CFR §60.562-2(d) and 25 Pa. Code §129.71.]  Paramany  Soc.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR part 60 or during this compliance review period.  There were no performance tests required under 40 CFR ob 8 during this compliance review period. The facility uses a contractor follows Method 21 to determine the presence of leaking sources. The contractor follows Method in this requirement. The contractor follows in the standards set forth in the standards set forth in place to ensure proper calibration gases are use as described in this requirement. The contractor follows in the standards set forth in the standards set forth in this requirement. The contractor follows in the presence of leaking sources. The contractor follows in the presence of leaking as described in this requirement. The contractor to comply with the standards set forth in this requirement. The contractor follows in the presence of leaking as described in this requirement. The contractor follows the footh in the standards set forth in this requirement.  The facility uses a contractor to comply with the standards set forth in this requirement. The contractor follows in the standards set forth in this requirement. The contractor follows for the presence of leaking as described in this requirement. The contractor follows in the standards set forth in t		Cocco	In the Permit	Compliance Status	with Terms & Conditions was:
There were no comply with the car seal option to prevent vent streams from 40 CFR §50.562-2(d) and 25 Pa. Code §129.71.]  Section D - II. [Additional authority for this permit condition is derived from 40 CFR §50.562-2(d) and 25 Pa. Code §129.71.]  (a) In conducting the performance tests required in 40 CFR 60.8 during this compliance tests methods in appendix A of 40 CFR part 60 or review period; thus this compliance eview period.  It is a contractor to comply with the standards set forth in the standa				6/29/18, and 12/24/18) during this reporting period.	
YLENE Section D - II.  [Additional authority for this permit condition is derived from 40 There were no CFR \$60.562-2(d) and 25 Pa. Code §729.71.]  There were no CFR \$60.562-2(d) and 25 Pa. Code §729.71.]  (a) In conducting the performance tests required in 40 CFR \$60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR part 60 or during this compliance review period; thus this requirement is not amenable to certification during this compliance review period. The standards set forth in this requirement.  The facility uses a contractor to comply with the standards set forth in this requirement.  The facility uses a contractor to comply with the standards set forth in this requirement.  The facility uses a contractor to comply with the standards set forth in this requirement.  The facility uses a contractor to comply with the standards set forth in this requirement.  The facility uses a contractor to comply with the standards set forth in this requirement.				Braskem America has chosen to comply with the car seal option to prevent vent streams from bypassing the flare.	
(a) In conducting the performance tests required in 40 CFR \$60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR part 60 or other metho	107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of	Section D - II. Testing Requirements	[Additional authority for this permit condition is derived from 40 CFR §60.562-2(d) and 25 Pa. Code §129.71.]	There were no performance tests required under 40 CFR 60.8 during	⊠Continuous □Intermittent
	Performance for New Stationary Sources §40 CFR 60.485]		(a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR part 60 or other metho	period; thus this requirement is not amenable to certification during this compliance review period.	
this requirement. The	procedures.)			The facility uses a contractor to comply with the standards set forth in this requirement. The contractor follows Method 21 to determine the presence of leaking sources. The contractor has work practices in place to ensure proper calibration gases are use as described in this requirement.  The facility uses a contractor to comply with the standards set forth in	

																																																																																													Oltarion	Citation	23-000 12 - 01000 12 - 01000
																																																																																											Section	•		Permit	73-000 F - DISSOURING
																																																								×																																				in the Permit		101110	Terms & Conditions Contained
d Company	and evaluation any components that are	components that are	discovered which require	discovered which require	to be added to the I DAR	to be added to the LDAR	program are included in	program are lifetuded in	the LDAR database and	and Etymon Brackem has a	monitored. Braskem has a	MOC process and a	MOC process and a	periodic review of	periodic review of	scheduled maintenance	scheduled mainterialice	activities to track any	activities to track any	shanges to I DAR	changes to LUAR	כוומושכט נס בדי ייי	components.	components.	components.	components.		1	For onlinment that is	To some in that is	1			components.	components.	componente	כומושכט נט בטי ייי	Changes to LUAN	abanges to I DAR	SCHAILES to hack any	activities to track any	it it in a land only	SCHOULCE HIGHING	scheduled maintenance	- Land maintanance	מווסמוכ וכאוכיי כי	neriodic review of		INIOC DIOCESS GIVE A	MOC process and a	וווטווונטומט. בומטונסווו וומס	monitored Braskem has a	: - District honor	the LUAK galabase allu	The DAD detabase and	טוסטומווי מוס ווויסיוים	nrogram are included in	ai politidod in	ני משממת ני נוים בדי	to be added to the LUAK	discovered willow tedanic	discovered which require	Components that are	components that are	alla evaluation any	ond ovalisation any	Tutough behout review	Through periodic review	1003	Compilation.	o moliono	וסו מפופוווווווווווווווווווווווווווווווו	for determining	compared with our point	and with 500 npm	background level is	the instrument and the	the instrument and the	בטווכפווו מויטו ווימוסמיס בי	concentration indicates by	Detweet and many	hetween the maximum	The arithmetic difference	the interface as possible.	 are traversed as close to	 potential leak litteriaces	to still look intorfoods	background level. All	Lating lovel All			Compilation Grand	Compliance Status		Ill Callo of Total
											<u> </u>								DELPI																																1																									The second secon															Conditions was.	O-selitions was:	with Terms &		100

Citation	Dermit	4		C
		refills & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
			collected during the current compliance period and thus, imposes no obligations during the current compliance review period.	
107 - PROPYLENE UNLOADING RACK [25 Pa. Code 8127 441]	Section D - III. Monitoring Requirements	The permittee shall monitor and record the amount of material loaded and unloaded each month.	The amount of materials loaded and unloaded are tracked in a facility	⊠Continuous □Intermittent
(Operating permit terms and conditions.)				
107 - PROPYLENE UNLOADING RACK [25 Pa. Code §127 441]	Section D - III. Monitoring Requirements	(a) The permittee shall monitor each component in accordance 40 CFR Part 60 Subpart VV.	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part	⊠Continuous □Intermittent
(Operating permit terms and conditions.)		(b) Fugitive VOC emissions shall be calculated using procedures and criteria approved by the Department.	of the facility LDAR Program. Production and emission data are tracked monthly and on a 12	
		(c) VOC emissions from this source shall be calculated using mass balance and engineering estimates appro	month rolling sum in accordance with department approved methodologies.	
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part	⊠Continuous □Intermittent
Performance for New Stationary Sources §40 CFR 60.482-2]		(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b), except as provided in 40 CFR §60.482-1(c) and (f) and	of the facility LDAR Program Facility is not claiming an exemption under this condition (d), thus this is	
			condition (a), thus this is	

□Intermittent	loaded and unloaded are tracked in a facility	The permittee shall keep the following records:	Section D - IV. Recordkeeping	107 - PROPYLENE UNLOADING RACK
⊠Continuous	The amount of materials			
	imposes no compliance obligations and are thus not amenable to certification.			
	(e) Statement of laws that			
	All leaks were repaired within 15 calendar days or placed on delay of repair.			
	components.			
	activities to track any			
	scheduled maintenance	8		
	MOC process and a			
	monitored. Braskem has a			service.)
	program are included in the LDAR database and			and in light liquid
	to be added to the LDAR			(Standards: Valves
	components that are			60.482-7]
	and evaluation any	With 40 CFR 800.402-7(D) 111100911 (C), 000000000000000000000000000000000000		Sources §40 CFR
	Through periodic review	the methods specified in 40 CFR \$60.485(D) and sildli comply		New Stationary
	Program.	(a)(1) Each valve shall be monitored monthly to detect leaks by		Standards of
	reports maintained as part		Requirements	[40 CFR Part 60
□Intermittent	and procedures in place, including VOC monitoring	[Additional authority for this permit conductor is also conducted and 25 Pa. Code §129.71.]	Section D - III.  Monitoring	107 - PROPYLENE UNLOADING RACK
⊠Continuous	Facility has work practices	in this possit condition is also derived from		service.)
	certification during this compliance review period.			(Standards: Pumps in light liquid
	not amenable to			
Conditions was:	Compliance Status	in the Permit	Section	
	Medila of perciliming	Terms & Conditions Contained	Permit	Citation Permit

[25 Pa. Code

Citation	Permit	Terms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms &
§127.441]		a. Number of loadings and unloadings on a monthly basis	tracking spreadsheet	
(Operating permit terms and		b. Amount of loaded and unloaded propane/propylene mixture	VOC emissions for the 107	
conditions.)		on a monthly basis	source is calculated	
N		c. The emissions from the loading and unloading operations on a monthly basis and 12-month rolling sum	monthly using approved emission calculation	
		d DAB compo	methodologies. A 12-	
		C. FUNIA COMPONI	determined. Facility has	
			work practices and	
			procedures in place, including VOC monitoring	
			reports maintained as part	
			Program.	
107 - PROPYLENE	Section D - IV.	[Additional authority for this permit condition is also derived from	This condition imposes no	NO SHI
[40 CFR Part 60	Requirements	40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]	additional requirements than those conditions	□Intermittent
Standards of		(a)(1) The permittee shall permit the	elsewhere in this Section.	
New Stationary		requirements of 40 CFR §60.486.	Facility has work practices	
Sources §40 CFR 60.486]			including VOC monitoring	
(Recordkeeping requirements.)		(2) The permittee may comply with the recordkeeping requirements for the sources in one record	reports maintained as part of the facility LDAR Program	
			Facility has work practices and procedures in place, including marked-in	
			P&IDs showing equipment in VOC service, as well as equipment not in VOC	
			(h) Statement of laws that	
			obligations and are thus not amenable to	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK **UNLOADING RACK** 60.565 Performance for Standards of 107 - PROPYLENE Sources §40 CFR **New Stationary** [40 CFR Part 60 requirements. recordkeeping (Reporting and Sources §40 CFR Standards of [40 CFR Part 60 **UNLOADING RACK** 107 - PROPYLENE 60.487] **New Stationary** Performance for requirements.) (Reporting 107 - PROPYLENE Citation Section D - IV. Recordkeeping Requirements Section D - V. Reporting Requirements Section D - V. Reporting Section Permit [Additional authority of this permit is also derived from 25 Pa. Code §129.100.] divert the emission stream away from the flare: following records for vent system containing valves that could (a) As per 40 CFR §60.565(b)(2), the permittee shall keep the (1) All periods when flow is indicated if fl... [Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.] information, summarized from the information in 40 CFR (a) All semiannual reports to DEP shall include the following (1) Process unit identification. (2) For each month duri... periods recorded under 40 CFR §60.565(b) when the vent The permittee shall submit to DEP semiannual reports of all Terms & Conditions Contained in the Permit compliance review period certification during this chosen to comply with the Braskem America, Inc. has program is in place car seal option. A monthly type, or of any production capacity, Changes such as car seal inspection documented within the addition of product replacement, removal or feedstock type, or catalyst Facility submitted are maintained in the Performance test results Change records. facility's Management of recovery equipment, are required by this condition semiannual reports as facility environmental files Means of Determining performance tests during the current period no specific requirements requirement and imposes This is a historical conducted during the There were no compliance review period the applicable information Braskem has submitted Compliance Status □Intermittent Conditions was: ∐Intermittent **⊠**Continuous with Terms & **⊠**Continuous Compliance

Citation	Permit	H		Page /8
		i erms & Conditions Contained	Means of Determining	Compliance
	oection	in the Permit	Compliance Status	with Terms & Conditions was:
UNLUADING RACK	Requirements	stream has been diverted from the flare.	in the semi-annual reports.	□Intermittent
Standards of			No vent streams were diverted from the flare in	
Performance for			this reporting period.	
New Stationary Sources §40 CFR 60.565]				
(Reporting and recordkeeping requirements.)				
107 - PROPYLENE UNLOADING RACK	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place	⊠Continuous
[40 CFR Part 60 Standards of Performance for		(a) The permittee shall demonstrate compliance with the	including VOC monitoring reports maintained as part of the facility LDAR	□Intermittent
60.482-1]		300.400(e) ioi ali equipment.	(c) Statement of law that imposes no compliance	
(Standards: General.)		(b) Compliance with 40 CFR §§60.482-1 to	obligations and is thus not amenable to certification. Additionally, the facility has chosen not to apply for a determination of equivalency during the	
107 - PROPYLENE UNLOADING RACK	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Except as reported and	☐Continuous
[40 CFR Part 60 Standards of			compliance certification or previous semi-annual	⊠Intermittent
Performance for New Stationary Sources §40 CFR		(a) Closed vent systems and control devices must comply with the respective provisions specified in 40 CFR § 60.482-10.	deviation reports, the Sunoco flare is operated and maintained in	
(Standards: Closed		(b) As per 40 CFR §60.482-10(f), except as provided in 40 CFR	60.18.	

Certification of Commission	DOIN DOOK		FD-to-mining	Compliance
Citation	Citation Permit	Terms & Conditions Contained	Means of Determining	
	Section	in the Permit	Compliance Status	Conditions was:
vent systems and			Although Braskem does	
control devices.)			flare associated with these	
			sources, according to	
			Energy Transfer Partners (FTP), the sample result of	
			the flare gas was less than	
			occasions (6/11/18,	
			6/29/18, and 12/24/18) during this reporting	
			period.	5
			nart of the facility LDAR	
			Program. Inspections	
			mechanical integrity	
2			program were conducted	
			review period. The closed	
			vent system is in	
			continuous operations	
			vented through it.	
		to drive and outbority for this permit condition is also derived from	Except for compressors	⊠Continuous
107 - PROPYLENE UNLOADING RACK	Section D - VI. Work Practice Standards	40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	which are controlled by 40 CFR § 60.482-10; and	□Intermittent
140 CFR Part 60			compressors that have no	
Standards of Performance for		(a) Each compressor shall be equipped with a seal system that	are subject to 40 CFR	
New Stationary		to the atmosphere, except as provided in 40 CFR §60.482-1	compressors are either	
60.482-3]			equipped with a barrier fluid system that prevents	
(Compressors.)			leakage of VOC to the	
			5	

Citation	Permit			r age ou
	Continue of the continue of th	reritis & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
			to a control device.	
			(f) Statement of law that impose no compliance obligations and are thus not amenable to certification	
			Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.	
			The facility did not exempt any compressors based on this condition during the compliance review period.	
UNLOADING RACK [40 CFR Part 60	Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place, including VOC monitoring	⊠Continuous □Intermittent
Performance for New Stationary		(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with postate in the	of the facility LDAR	
Sources §40 CFR 60.482-4]		emissions, as indicated by an instrument reading of less than	All leaks were repaired	
(Standards: Pressure relief devices in gas/vapor service.)			placed on delay of repair.	
107 - PROPYLENE UNLOADING RACK	Section D - VI. Work Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.1	Sampling connection	⊠Continuous
[40 CFR Part 60 Standards of			a closed purge system.	□Intermittent
Performance for		(a) Each sampling connection system shall be equipped with a	The closed purge system is designed to capture and	

	Continuous	or Intermittent Compliance			
-	23-00012 - BRASKEM AMER INCIMARCUS HOOK  Citation Permit	Permit Permit	Terms & Conditions Contained	Means of Determining	Compilation
	Changi	Section	in the Permit	Compliance Status	with Terms & Conditions was:
	New Stationary		closed-purge, closed-loop, or closed-vent system, except as	transport the purged fluid to a control device.	
	Sources §40 CFR 60.482-5]		blokided III 40 CLLX 300. 104 - XV	The facility did not exempt any sampling systems	
	(Standards: Sampling connection systems.)		(b) E	based on this condition during the compliance review period.	
	107 - PROPYLENE	Section D - VI. Work  Practice Standards	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place,	☐Continuous ⊠Intermittent
	[40 CFR Part 60 Standards of		(a)(1) Each open-ended valve or line shall be equipped with a	reports maintained as part of the facility LDAR Program.	
	New Stationary Sources §40 CFR 60.482-6]		cap, blind flange, blug, of a second varie, order 1975, 40 CFR §60.482-6(d) and (e).	Observed the design of several pressure relief valve piping configurations	
	(Standards: Open- ended valves or lines.)		(2	that was not equipped with a cap, blind flange, plug, or second valve which resulted in an Open Ended	
			the state for this pormit condition is also derived from	Facility has work practices	⊠Continuous
	107 - PROPYLENE UNLOADING RACK	Section D - VI. Work Practice Standards	[Additional authority for this permit contained is also seemed at the CFR §60.562-2(a) and 25 Pa. Code §129.71.]	and procedures in place, including VOC monitoring	□Intermittent
	[40 CFR Part 60			reports maintained as part of the facility LDAR	
	Standards of Performance for		(a) If evidence of a potential leak is found by visual, audible,	Program.	
	New Stationary		heavy liquid service, pressure relief devices in light	All leaks were repaired	
	Sources §40 CFK 60.482-8]			placed on delay of repair.	
	(Standards: Pumps				
	and valves in neavy				
	pressure relief				

Citation	Downie			
	9 1	lerms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms &
devices in light liquid or heavy liquid service, and connectors.)				
107 - PROPYLENE UNLOADING RACK	Section D - VII. Additional	This source consists of compressors, pumps, loading racks, product storage, knockout pots, transfer lines, and associated	Statement of law that imposes no compliance	⊠Continuous
[25 Pa. Code §127.441]	Kequirements	equipment for purchased polymer grade propylene and purchased refinery grade propylene.	obligations and is thus not amenable to certification.	□Intermittent
(Operating permit terms and conditions.)				
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]	Facility has work practices and procedures in place, including VOC monitoring	⊠Continuous □Intermittent
Performance for New Stationary Sources \$40 CEP		(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit object.	of the facility LDAR Program.	
(Standards: Delay of repair.)		micasible will but a process unit shutdown. Repair of this e	(b) Statement of law that impose no compliance obligations and are thus not amenable to certification	
			Facility has not chosen to utilize this exemption for repair during this compliance review period.	
UNLOADING RACK [40 CFR Part 60	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 40 CFR §60.562-2 and 25 Pa. Code §§127.512(h) and 129.71.]	This is a historical requirement and imposes no specific requirements	⊠Continuous □Intermittent
Standards of Performance for New Stationary	Œ	(a) As per 40 CFR §60.562-2(a), the permittee shall comply with the requirements specified in 40 CFR §§60.482-1 through	during the current period.  LDAR program was instituted at startup.	
0001 000 8 40 OI V	ħ		Facility has chosen not to	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK VOC.) 60.562-2] Equipment leaks of (Standards) PUMP ENGINES §123.21] 108 - FIRE WATER [25 Pa. Code PUMP ENGINES (General) operating limitations emission limitations, §40 CFR 63.6640] Source Categories **NESHAPS** for [40 CFR Part 63 108 - FIRE WATER and other compliance with the continuous demonstrate ( How do I requirements?) 108 - FIRE WATER Citation Restrictions -Section D - I. Restriction(s) Emission Section D - I. Operating Hours Restriction(s) Restrictions -Section D - III. Section Permit (b) As per 40 CFR §60.562-2(d), the per... of sulfur oxides from a source in a manner that the concentration exceeds 500 parts per million, by volume, dry basis. of the sulfur oxides, expressed as SO2, in the effluent gas No person may permit the emission into the outdoor atmosphere §63.6640(f). according to the requirements specified below as per 40 CFR The permittee must operate the emergency stationary RICE The permittee shall monitor and record the operating hours each Terms & Conditions Contained in the Permit apply for a determination current compliance period elect this option during the of equivalency during the current compliance period Facility has chosen not to 40 CFR 60.486 and reporting consistent with recordkeeping and LDAR work practice for The facility adheres to ensures compliance with diesel fuel at the facility 60.487. the emission limit. Use of ultra-low sulfur are within guidelines. engine to confirm the uses operating hours of each Means of Determining The facility tracks The facility tracks Compliance Status Conditions was: □Intermittent ∐Intermittent with Terms & Compliance 

Citation	Dormit			Page 84
	)   I	Ferms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
[25 Pa. Code §127.441]	Requirements	time the engines are operated.	operating hours of each engine to confirm the uses are within guidelines.	Intermittent
(Operating permit terms and conditions.)				
108 - FIRE WATER PUMP ENGINES	Section D - III.  Monitoring  Requirements	The permittee must install a non-resettable hour meter.	Facility performs routine checks on engines and	⊠Continuous
[40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]	Requirements		records operating hours.	□Intermittent
(What are my monitoring, installation, operation, and maintenance requirements?)				
108 - FIRE WATER PUMP ENGINES [25 Pa. Code \$127,441]	Section D - IV. Recordkeeping Requirements	The permittee shall keep the following records each time the engines are operated:	The facility tracks operating hours of each engine to confirm the uses are within quidelines	⊠Continuous □Intermittent
(Operating permit terms and conditions.)		<ul><li>(a) The date</li><li>(b) The reason(s) the engine was operated</li><li>(c) Hours operated</li></ul>		
108 - FIRE WATER PUMP ENGINES [40 CFR Part 63 NESHAPS for	Section D - IV. Recordkeeping Requirements	[Additional authority of this permit condition is also derived from 25 Pa. Code §129.100.]	The facility documents any maintenance performed to ensure the engines are following manufacturer's	⊠Continuous □Intermittent
Source Categories §40 CFR 63.6655]		The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE was operated and maintained according to	recommendations.	

keep?) Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK PUMP ENGINES (What records must §40 CFR 63.6660] Source Categories **NESHAPS** for 108 - FIRE WATER §129.97] PUMP ENGINES keep my records?) how long must I (In what form and [40 CFR Part 63 108 - FIRE WATER and petition for emission limitations requirements, RACT compliance alternative (Presumptive RACT [25 Pa. Code PUMP ENGINES 108 - FIRE WATER schedule.) §40 CFR 63.6603] Source Categories NESHAPS for (What emission [40 CFR Part 63 requirements must I limitations, and other limitations, operating Citation Recordkeeping Section D - IV. Requirements Practice Standards Section D - VI. Work Practice Standards Section D - VI. Work Section Permit owner's maintenance plan (a) Your records must be in a form suitable and readily available 5 years following the date of each occurrence, measurement, for expeditious review according to §63.10(b)(1). maintenance, corrective action, report, or record. (b) As specified in §63.10(b)(1), you must keep each record for accordance with manufacturers specifications. The permittee shall maintenane and operate the source in (c) You... specified in Item 4 of Table 2d to 40 CFR 63 Subpart ZZZZ: The permittee must comply with the following requirements as annually, whichever comes first; annually, whichever comes firs... (a) Change oil and filter every 500 hours of operation or (b) Inspect air cleaner every 1,000 hours of operation or Terms & Conditions Contained in the Permit necessary operating and The facility maintains maintenance records. specifications. Routine manufacturer The facility maintains is scheduled through the preventative maintenance tracking system facility's maintenance Means of Determining through the facility's maintenance is scheduled Routine preventative maintenance tracking **Compliance Status ⊠**Continuous □Intermittent Conditions was: ☐Intermittent with Terms & Intermittent Compliance

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK §40 CFR 63.6640] compliance with the continuous demonstrate Source Categories and other operating limitations emission limitations ( How do I PUMP ENGINES requirements?) §40 CFR 63.6595] Source Categories **NESHAPS** for 108 - FIRE WATER C02 - FLARE subpart?) comply with this (When do I have to [40 CFR Part 63 §127.441] ASSISTED) SYSTEM (STEAMconditions.) terms and (Operating permit [25 Pa. Code Citation Section D - VII. Requirements Additional Monitoring Requirements Section D - III. Section Permit the manufacturer... (a) Operating and maintaining the stationary RICE according to 40 CFR 63 Subpart ZZZZ no later than May 3, 2013. [Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).] The permittee must comply with the applicable requirements of approved device (a) The permittee shall using a gas chromatography (GC) analyzer or Department 0 monitor continuously the heat content of the flare gas monitor continuously the velocity of the gas ... Terms & Conditions Contained in the Permit system to confirm that is performed preventative maintenance maintenance scheduling operating hours and a system to confirm that spreadsheets to document established tracking gas analyzer. Flare exit is performed. preventative maintenance maintenance scheduling The facility uses a dedicated flare flow velocity is measured using BTU value using a flare Means of Determining The facility measures flare Compliance Status Conditions was: ∐Intermittent with Terms & ☐Intermittent Compliance

Compliance Status  Compliance St		permit terms and			
Compliance Status  Facility records are maintained for the net heating value, exit velocity, and data availability.  Pacility has work practices and procedures in place in accordance with applicable regulatory requirements and as specified by individual terms and conditions of the flare practices include a process for review and correction of deviations reported via routine "odor and visible emission inspections" and the facility's total event reporting process.  To prevent the detection of malodorous air malodors outside of the property, the facility has work practices in place, in accordance with		applicable regulatory requirements and as specified by individual			(Operating permit terms and
Compliance Status  Sof:  Facility records are maintained for the net heating value, exit velocity, and data availability.  De available at all  Facility has work practices and procedures in place in accordance with applicable regulatory requirements and as specified by individual terms and conditions of this Permit. These practices include a process for review and correction of deviations reported via routine "odor and visible emission inspections" and the facility's total event reporting process.  To prevent the detection of malodors outside of the property, the facility has		work practices in place, in accordance with			[25 Pa. Code §127.441]
Compliance Status  Facility records are maintained for the net heating value, exit velocity, and data availability.  Illable at all  Facility has work practices and procedures in place in accordance with applicable regulatory requirements and as specified by individual terms and conditions of this Permit. These practices include a process for review and correction of deviations reported via routine "odor and visible emission inspections" and the facility's total event reporting process.	⊠Continuous  ☐Intermittent	To prevent the detection of malodors outside of the property, the facility has	The flare shall be operated with no emissions of malodorous air contaminants detectable beyond the plant's property in conformance with 25 Pa. Code Section 123.31	Practice Standards	SYSTEM (STEAM- ASSISTED)
Compliance Status  of:  Facility records are maintained for the net heating value, exit velocity, and data availability.  Example at all  Facility has work practices and procedures in place in accordance with applicable regulatory requirements and as specified by individual terms and conditions of this Permit. These practices include a process for review and correction of deviations of deviations.		reported via routine "odor and visible emission inspections" and the facility's total event reporting process.	(b) The permittee shall submit		
intain daily records of:  Facility records are maintained for the net heating value and the exit rolling average  arter's data shall be available at all  Facility records are maintained for the net heating value, exit velocity, and data availability.  Facility records are maintained for the net heating value, exit velocity, and data availability.  Facility records are maintained for the net heating value, exit velocity, and data availability.  Facility records are maintained for the net heating value, exit velocity, and data availability.  Facility records are maintained for the net heating value, exit velocity, and data availability.  Facility records are maintained for the net heating value, exit velocity, and data availability.  Facility records are maintained for the net heating value, exit velocity, and data availability.  Facility records are maintained for the net heating value, exit velocity, and data availability.		terms and conditions of this Permit. These practices include a process for review and correction of deviations	during normal working hours of any malfunction of the flare which is expected to last longer than two hours.		terms and conditions.)
intain daily records of :  Facility records are maintained for the net heating value and the exit r rolling average  permit condition is also derived fom accordance with  Compliance Status  Facility records are maintained for the net heating value, exit velocity, and data availability.  Facility has work practices and procedures in place in accordance with		applicable regulatory requirements and as specified by individual	the Department within		[25 Pa. Code §127.441]
Compliance Status  ds of :  Facility records are maintained for the net heating value, exit velocity, and data availability.	⊠Continuous □Intermittent	Facility has work practices and procedures in place in accordance with	permit condition is also	Section D - V. Reporting Requirements	SYSTEM (STEAM- ASSISTED)
Compliance Status  ds of : Facility records are maintained for the net heating value, exit velocity, and data availability.			(2) At least 90% of each quarter's data shall be available at all		
Facility records are maintained for the net heating value, exit velocity, and data availability.			(c) the calculations of the net heating value and the exit velocity, on a three (3) hour rolling average		terms and conditions.)
Facility records are maintained for the net heating value, exit velocity, and data availability.			(b) the readings of the exit velocity		8127.441]
Compliance Status  Facility records are maintained for the net		and data availability.	(a) the readings of the heat content		[25 Pa. Code
Compliance Status	Continuous	Facility records are maintained for the net	(1) The permittee shall maintain daily records of :	Recordkeeping Requirements	SYSTEM (STEAM- ASSISTED)
	with Terms Conditions w	Compliance Status	in the Permit	Section	
Means of Determining	Compliance	Means of Determining	Terms & Conditions Contained	Permit	Citation

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK conditions.) SYSTEM (STEAM-C02 - FLARE §127.441] ASSISTED) terms and [25 Pa. Code SYSTEM (STEAMconditions.) (Operating permit C02 - FLARE ASSISTED) [25 Pa. Code Citation Section D - VI. Work Practice Standards Additional Requirements Section D - VII. Section Permit [Additional authority of this permit condition is also derived from 25 Pa. Code §129.97(c)(6).] The permittee shall manufacturer's specifications and/or good operating practices. (a) [Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).] according to ... 0 operate and maintain all devices according to calibrate the GC analyzer and the gas flow meter, Terms & Conditions Contained in the Permit conditions below. These and visible emission process for review and practices include a inspections", the facility's reported via routine "odor correction of deviations program. Compliance Detection and Repair hydrocarbon Leak process, and the total event reporting staff of the reports and Braskem America, Inc. consisted of a review by review for this term these work practices. engineering practices. accordance with good analyzer and flow meter in place to maintain the flare Facility has system in records associated with equipment take place on a Calibrations of this Means of Determining monthly basis. obligations and are thus impose no compliance Statement of law that not amenable to Compliance Status Conditions was: □Intermittent with Terms & ∐Intermittent Compliance

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(Operating permit The terms and conditions.)	§127.441]		Section
The flare system is for the control of Volatile Organic Compound (VOC) emissions from Plant 1 and Plant 2 manufacturing sources, except the typical atmospheric venting - PSV lifts, etc.		in the Permit	erms & Conditions Contained
certification.		Compliance Status	Means of Determining
	Conditions was:	with Terms &	Compliance

		right.